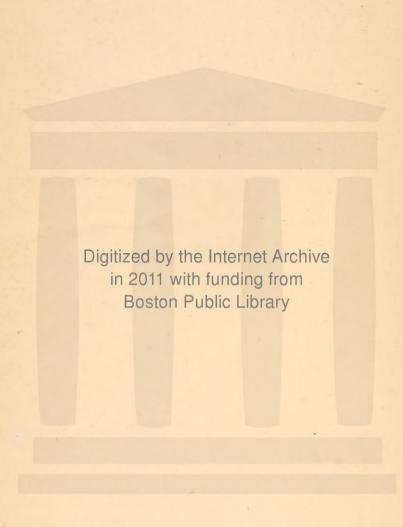
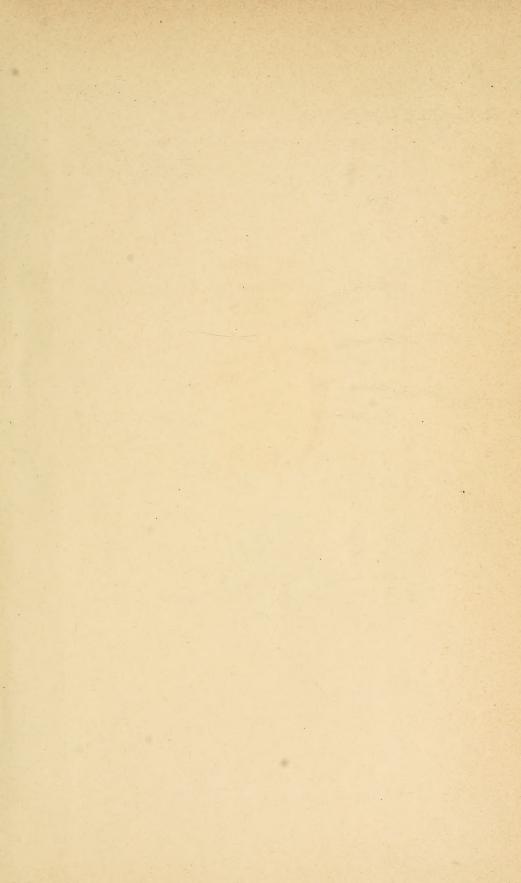
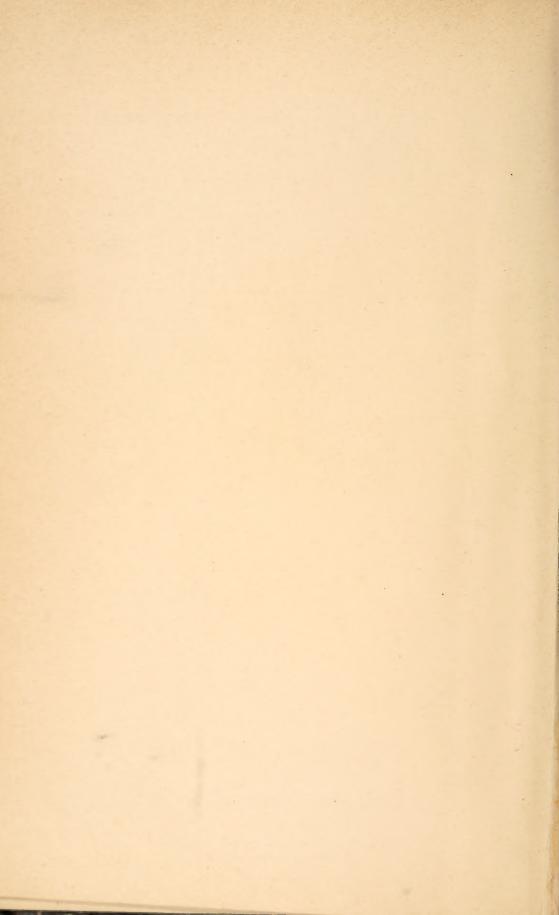




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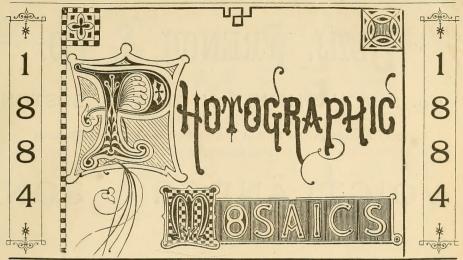


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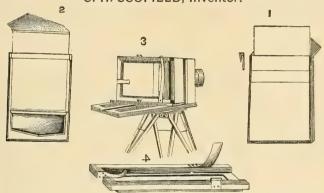
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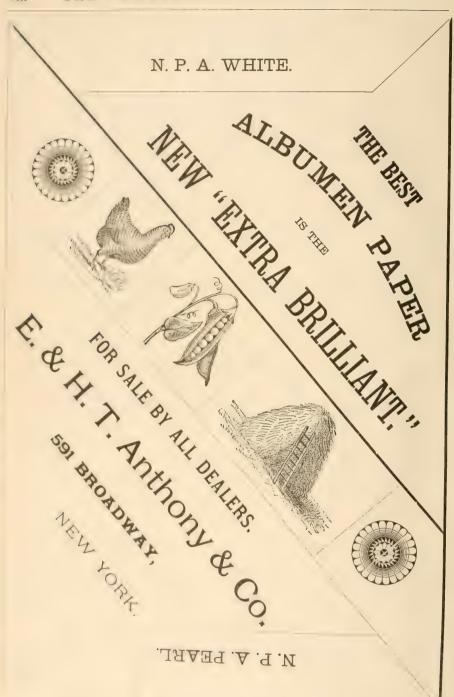
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Philadelphia Photographer.

EDITED BY EDWARD L. WILSON.

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JANUARY, 1884.

No. 241.

1 - 21.

HISTORY sometimes repeats itself we are told, and why should not we? In looking over what we said to our readers on page 13 of our issue for January, 1864, (you who have it please refer), we find something like this: "In making our editorial bow we feel very diffident and humble, for we fear that the public may be amused at our awkwardness. We should bow very low indeed and retire, but our readers will want to know what this new Journal means to do, and what it intends to advocate. So in a few words we will endeavor to explain."

In trying to find some winged words with which to greet our readers on this beginning of the year of our majority, we thought it well to look back to what we said during the first year above alluded to, and see how much change would be needed for the opening address now from that which was given to our readers quite twenty years ago. It seems right that the same promises that were made then should fall good now. For example, we stated that photography and its advancement should be our chief end: that we should be different from other magazines in many ways; that we invited contributions from all interested in our art, and inquiries from all desiring information, at the same time opening our pages for discussions on topics of interest pertaining to the art we advocate, that these columns might be filled with useful and instructive matter.

Moreover, we promised a fine specimen photograph, worth at least as much as we charge for the whole number. A volume was thus to be produced finely illustrated and well worthy of handsome binding. No care was to be spared in making each succeeding number quite equal to what we promised, and, if possible, better than the last. And then, when discussing our success in such an undertaking, we added "Much depends upon ourselves, yet much upon our patrons. The interest now taken in photography gives us hope. Grant us your patronage and good word, and we promise you shall not be disappointed."

Whether we have filled this long line of promises it is hardly fair for us to judge, but we begin the twenty-first year of our existence with the same hope and aspiration to be useful as we did our first; certainly with a good deal more knowledge and experience, but with no less desire to make our magazine as useful as we know how. As announced in our prospectus on page three of the cover, we shall endeavor to maintain the character of the PHILADELPHIA PHOTOGRAPHER as the best photographic magazine in the world. We believe we are the only one who can claim to have been editor of a photographic monthly continuously for twenty uninterrupted years. (What a story we could tell of these past twenty years of photographic life.) It is incumbent upon us, therefore, to bend our energies more earnestly than ever to provide for the constantly increasing number

I

of our subscribers. Not only will the best information be given them, and all that is of value to them in the prosecution of their art in their business, but it shall invariably be the earliest, for our agents and correspondents are constantly on the alert all over the world for everything that is new and useful, and good for our pages.

Amateurs and active workers will find this magazine always ahead and substantially the one to be preferred above others, even should all the rest be taken, as we hope they will be. We wish to produce a truly legitimate photographic magazine, and hold up the hands of those who strive for the best interests of our art, condemning all who would lower, injure, or defame it.

The circulation of our magazine, we believe, is as large as that of any two others in the United States. This is easily accounted for when we compare the quality and standing of the photographer of to-day with him of twenty years ago or more. The photographer of 1884 is a better educated man, on an average, a younger man, a man with higher aspirations and with greater thirst for knowledge, and therefore with more disposition to read, consequently he will have the best. Therefore, with such encouragement, more than ever shall we try throughout the year of our majority, to hold this high position, which we have striven for and are told that we have attained. Enough is said; let us place our hands under the cloth, draw a sharp focus, throw the light upon the subject while he is posed and go ahead, leaving the future to develop the results for which we hope. We do not lean upon each other, but walk shoulder to shoulder in this matter. Our interests are mutual; the more new subscribers you send us in connection with your own prompt remittance for 1884, the greater will our growth be and the more will you get for your money, for we shall have more to spend upon our magazine in improvements.

PHOTOGRAPHIC MOSAICS, 1884.

Photographic Mosaics for ISS4 has been pronounced by a number of readers, so far as we have heard, as "the peer of all its preduce or Some have expressed themselves

thus: "We have thought for a number of years that each time Mosaics was about as good as it could be, and yet somehow you contrived in the following year to make it better. I said to myself, as 'I read 1883, 'This is the nineteenth year of Mosaics; surely its editor will have to depart when the twentieth comes, for I don't see how he can make Mosaics as good again as it is now,' but by my bath and my developer, sir! you have exceeded yourself this time, and but for that you would have failed, according to my prediction. I congratulate you upon it, and name two thousand extra copies as the number which you will sell over and above what you sold last year."

We modestly accept the first portion of our friend's statement, since he has made it, and we cannot help ourselves, but will be compelled to hide if anything like the demand which he predicts follows, since our edition is printed and the types are distributed. The issue is limited, and if the few hundreds remaining are taken up during the month, unless we buy some copies back, as we often do, it will be impossible for the lag-behinds to supply themselves. A word to the wise is sufficient, we are sure, when backed up by the request to examine the bill of fare in the advertising column.

MR. RYDER'S NEW ART GAL-LERY IN CLEVELAND.

WE had the happiness, during a visit to Cleveland, to be present at the opening of Mr. J. F. Ryder's new art gallery, recently completed and added to his already extensive establishment. It is well known that Mr. Ryder some months ago embodied the Decker establishment, on Superior Street. with that of his own, making the most extensive photographic establishment in the He then found that his growing business as cateror to the art tastes of the people of Cleveland required him to make still further additions and alterations. This having been done, he finds himself in possession of not only new and handsome reception-rooms--a floor lower than his old one ---but also a new ground-floor art exhibition parlor, devoted to the display of oil paintings

and other works of art, destined to be a favorite resort of the art lovers of the city.

There can be but one opinion as to the advantages of such a noble gallery in a city like this, for Cleveland is not only the home of a great number of artists, but also of a great many collectors of paintings and sculpture with other things beautiful and rare in literature and art. No one has been more useful in catering to the finer tastes of the public than has Mr. Ryder, both by encouraging home talent and in providing for the wants of the people in this direction. His new art gallery is certainly one of the most complete and splendidiy accoutered in the west. It is excellently lighted, tastefully adorned, and splendidly furnished. During the week we had the pleasure of looking in upon it several times. The principal portion of the work exhibited on the walls then was that of Mr. William Bradford, the American Polar Sea artist, whose name is known to all of our readers.

We allude to Mr. Bradford and his work in another portion of our issue, and merely have to add now our congratulations to Mr. Ryder upon at last reaching his desires in the opening of such an establishment. Lovers of art will certainly avail themselves of it, though we have no doubt that Mr. Ryder states it truly when he says, that "the work of interesting people in the matter of fine art is an educational one and an up-hill one." The true artist always wonders and queries why it is that so little interest is taken by the public, and why we find so few cultivated artistic minds able and willing to receive that which is beautiful and reject that which is bad. But such is the state of affairs, and those who have the real art feeling must continue to work along without hesitation, and the results are sure.

We hope Mr. Ryder may reap an abundant reward for his enterprise, and as a return for his extensive investment. He is personally one of the most genial of men, very popular among the people, and will not be overlooked.

OUR PICTURE.

THE splendid study which embellishes the initial number of the twenty-first year of our magazine's life, is from the studio of Mr. J.

H. Kent, Rochester, N. Y, the President of the Photographers' Association of America. The single picture which will appear before our readers will give but a faint idea of what Mr. Kent has accomplished in providing this picture, because no one of them will be privileged to see the fifty magnificent negatives which he sent us for the production of our edition. These fifty negatives, most of which were equal in quality to the one from which the print which you will see before you was made, Mr. Kent says. were made in an hour and a half, with a loss of but two in the entire lot. They were all made on Eastman's "Special" dry plates, very rapid.

The subject is the Hon. George G. Clarkson, of Rochester, a gentleman whose remarkable advantages as a photographic subject every photographer with artistic feeling will at once discern. Such magnificently rendered flesh, such delicacy of light and shade and half-tones, could not be procured by the wet process we are quite sure; and, although we hear a number yet who still adhere to their notion that the dry process is not so good as the wet, we believe it would be wiser, in view of the picture before us, to say, that it may perhaps be different from the wet. Although it is distinctly different, we confess ourselves to having grown as contented with it as we ever felt with our results by the wet method.

Certainly we are much indebted to Judge Clarkson for the excellent negatives which have been placed in our hands to diffuse so much pleasure among our subscribers from one end of the world to the other. For even thus early in our twenty-first year we are glad to be able to say that our magazine goes to the west coast of Africa, to Egypt, to Buenos Ayres, to South Australia, England, France, Russia, New Zealand, Mexico, Germany, India, China, Japan, Belgium, Austria, and Arabia, and to each one of the United States.

We are sure then we speak the desire of all when we pronounce a hearty vote of thanks to him for his patience in sitting so many times for the cause of art and photographic science.

Of Mr. Kent's liberality there can be but one opinion. We assured him that the time was short to print the quantity desired for our large January edition, but not despairing, he good-naturedly made negatives in quantity which we were obliged to pronounce quite sufficient. They would be a study to any one, could they be looked over, to see how very uniform they are in their quality; indeed, it is phenomenal, without exaggeration, and we thank him for all his efforts in behalf of the fraternity at large.

Mr. Eastman's plates speak for themselves. The negatives are perfectly free from dirt and spots, and, as we have said, are of uniformly excellent quality.

We have frequently alluded to the fact that our pictures are printed on the Eagle brand of paper imported for us by Mr. G. Gennert, of New York. We have not meant by this that Mr. Gennert imported any special brand for our use, of a quality superior to that sent to others. Indeed, Mr. Gennert, on the contrary, assures us that the paper sent to us for "our picture" from time to time, "is taken from the ordinary stock," as the reams happen to rise up from the extensive pile which he is obliged to import and try to keep on hand constantly, and therefore what our readers see are simply samples of what may be produced with ordinary care by any printer. Our printers assure us that they could not desire a paper more uniform in its results, or easier to manipulate. What more can we say for it, since the results are before you to prove our words? We all owe much to Mr. Gennert for his enterprise and cure.

PYRO AND CARBONATE POTASSA DEVELOPER.

A Modification of Dr. Stolze's and Dr. Edur's Formula.

BY G. CRAMER.

Stock Sedulion No. 1.

Stal. Salution No. 2.

Precise of Matthel Water. Sounces. Carbonate of Potassa, pure, 3 ounces. The sulphite of soda, carbonate of potassa, and both stock solutions should be kept in well-stoppered bottles, glass stoppers are preferable for the carbonate of potassa. The latter should be completely soluble in the given quantity of water, if sufficiently pure.

Developer.

The developer should be used within a couple of hours after mixing, as it will work slower and produce yellow negatives when old.

This developer is very powerful, and can be worked with one-half the exposure required by many other developers in use. If the time of exposure was correct, it will produce good intensity and detail without having to strengthen the negative afterwards, which result can easily be obtained if proper attention is given to the development and correct exposure.

The lights should have sufficient density and all the detail in the shadows should be well brought out when the development is completed.

If the plate was over-exposed, the detail in the shadows will appear too soon, and will be all developed before the lights have gained sufficient intensity, the resulting negative being flat and without sufficient contrast. As soon as you notice in developing that the plate has been over-exposed, add immediately to each four ounces of developer, one drachm of bromide solution (one ounce of bromide of ammonium, twenty ounces of water), which will produce more intensity and will save the negative.

If the plate was under-exposed, which seldom occurs with this developer, the detail in the shadows will not appear in time and the negative, if fully developed, will be too strong in the lights and deficient in detail in the shadows. In this case the negative may be improved by adding to the developer in the dish three times its bulk of cold water; move the dish to insure a good mixing, cover it and allow to stand quietly, giving plenty of time for the development of the detail, which will come provided the exposure has not been entirely too short.

Fixing Bath.

Dissolve. $\frac{1}{2}$ pound of powdered alum in $\frac{1}{3}$ gallon of water; then dissolve 1 pound of hypo in $\frac{2}{3}$ gallon of water. After both are dissolved, pour the alum solution in the hypo. Fix in

Hyposulphite of Soda, . 1 pound. Water, . . . 1 gallon. Powdered Alum, . . ½ pound.

If the negative is intense and yellow, it can be improved by pouring the following graying solution over it after fixing:

 Water,
 .
 .
 10 ounces.

 Powdered Alum,
 .
 .
 1½ ounces.

 Oxalic Acid,
 .
 .
 ½ ounce.

This changes the color from yellow to gray, and improves the printing quality of an intense negative. If the negative is not too intense, the graying solution should not be used.

After fixing wash well to eliminate all traces of hypo.

A FRIENDLY VISIT.

A GOOD IDEA.

WHILE sitting at the late Milwaukee Convention, and listening to the many questions asked and answered, I could not help thinking, "How much good could be done if photographers would continue this each month in the Philadelphia Photographer." I would have these questions and answers headed "A Friendly Visit," and I would run them something like the following:

Q. What is the best means for removing silver stains from the hands?

FRIEND WAGER, Sycamore, Illinois.

A. First rub the stains with tincture of iodine, which changes then to iodide of silver, then remove the iodide of silver with liquid ammonia.

S. L. PLATT, Elgin, Illinois.

Now some queries for our next:

Q. What can be added to a cyanide fixer to prevent dark stains upon the film?

S. L. PLATT, Elgin, Illinois.

Q. Is there anything in which prints can

be immersed before toning to prevent grayness, or from showing the red spots?

S. L. PLATT, Elgin, Illinois.

To these last questions I wait for an answer, trusting that somebody will answer them, when our good editor will doubtless repeat the queries with the anwers given. The above only can give an idea of what I hope may be done, to the great satisfaction and help of many photographers.

Be sure to have the name of each one asking and answering the question, with the address printed, so that we can know who is doing us a kindness. I am willing to answer all questions in my power connected with both the wet and dry plates.

Very truly yours,

S. L. PLATT.

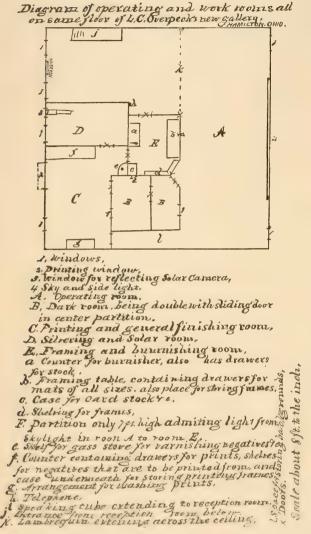
ELGIN, ILLINOIS.

[Certainly we hope that our readers will take to this splendid idea. We are quite willing to give the space to it, and trust it will be taken advantage of.—Ed. P. P.]

INTENSIFYING EMULSION PLATES.

With the following intensifier everything desired may be effected, especially with plates under-exposed, which may, by means of it, be converted into brilliant negatives. It must be borne in mind that every trace of hyposulphite must be eliminated from the gelatine film; if even the minutest portion remains, the plate will turn brown. If the plate is under-exposed, the development is not carried to its limit, so that the plate is rather thin after fixing. It is then thoroughly washed and flowed over with a solution consisting of 150 grains of bichloride of mercury and 12 ounces of water until the required strength is obtained. The plate, which, previous to the operation, lacked detail, will now appear sharp and distinct. The plate is again washed and flowed with a solution of 5 drachms of ammonia in 12 ounces of water, till the film darkens, when it is again washed and dried. The plates which it is intended to strengthen should not be subjected to the alum bath, either before or after intensifying. The mercury solution may be saved, but the ammonia solution must be made fresh every time.-DR. V. MONCKHOVEN in Photo. Zeitung.

A PAGE FROM MOSAICS.



The above is a page taken directly from Mosales 1884. We print it exactly as it came from the pen of Mr. Overpeck to show the wonderful progress made in photo engraving.

BROMIDE OF SILVER EMULSION.

Amono the thousand and one methods which have been suggested for the preparation of the bromide of silver emulsion, many formulæ have been given which afford partially good results; in most cases, however, wanting in gradations of tone in the higher lights and relief in the shadows.

I beg leave to offer a method, the result of a long series of experiments, by which the faults just mentioned may be obviated.

I take three beaker glasses: in the first I put twenty-four grammes of bromide of potassium; twenty-five grammes of iodide of potassium; twenty grammes of best gelatine; two hundred cubic centimetres of distilled water; three or four minims of glacial acetic acid, or 0.1 gramme of citric acid. In the second glass I put thirty grammes of crystallized nitrate of silver in one hundred cubic metres of distilled water. In the third glass I dissolve twenty grammes of the best gelatine, (fourteen hard, six soft) for warm weather, and ten grammes each in winter. in two hundred and fifty cubic centimetres of distilled water.

The contents of the first glass are subjected to different degrees of heat

until the gelatine is dissolved. The solution is then transferred to a black bottle supplied with a loosely fitting cork, fifty cubic centimetres of water added, and the whole shaken, and then the nitrate of silver solution, little at a time, the bottle being well shaken after each addition. The bottle with its contents is again heated for two hours at a temperature of 65° C., after which the emulsion is rapidly cooled down to 30° C. During this time the gelatine is allowed to dissolve in

the third glass, and cooled down to a point at which it remains firm, but still in a fluid condition.

Six or seven cubic centimetres of ammonia are now added, the whole well shaken, and poured into the bromide of silver gelatine emulsion which has been cooled down to 30° C., again shaken, and immediately filtered through flannel into a porcelain dish and left to set. After setting, the gelatine is pressed through canvas and washed for seven hours in running water; then remelted and refiltered. The emulsion is now ready to be poured on the plates.

The advantages of this method are that the emulsion is only digested, so that the mass does not run the risk of injury. Second, the ammonia by being mixed with second portions of gelatine solution is only thinned, and in this condition is first brought in contact with the bromide of silver gelatine emulsion. Third, in the preparatory filtering which keeps back the coarse portions of the emulsion, the danger of impurities passing through the second filtering is avoided.—Franz Kniebel, Photographische Correspondenz.

THE PAINTINGS OF MR. WILLIAM BRADFORD, OF NEW YORK.

A FEW hours after the visit by us to the new art gallery of Mr. Ryder, at Cleveland, described on another page, we found in our box at the hotel the following: "Mr. Ryder's compliments, and requests the pleasure of your company to a private view of the paintings of Mr. William Bradford, of New York, from sketches taken by him on his several extensive visits to the polar regions. During the evening Mr. Bradford will give a short lecture with photographic illustrations of the wonders of that mysterious land, the same as those given by him before the Royal Institution and the Royal Geographical Society of London, and also the Geographical Society of New York, on Thursday evening, October 18, 1883, at eight o'clock."

To such a splendid offer as this we could make but one answer, namely, that we would take advantage of the offer. And in due course we put on a thick overcoat, repaired

to the scene of action, and propose now to tell our readers a little of what we saw.

Entering Mr. Ryder's art gallery we found Mr. Bradford in evening dress, meeting his guests. He is a courteous, quiet, rather timid gentleman, highly cultivated, and is a delightful conversationalist. Some twenty or thirty of his magnificent paintings of the Polar regions and the Yosemite Valley were hanging upon the wall in great variety of color and subject. Not being a professional art critic. it would be unbecoming in us to do much more than express our delight at such a treat. Mr. Bradford's reputation as a Polar Sea painter has been long established by his lovely reproductions of the picturesque scenery along the Nova Scotian and Labrador coasts. He is what may be called a truthful painter, following nature conscientiously, adorning her, or changing her but little, except where her arrangements do not suit the limits of his canvas. All this excellency of Mr. Bradford's work is easily accounted for when we know the man, noble, generous, broad in his views, full of the intensest, tenderest art feeling, with a quick perception of what is beautiful and effective. As we have said, his pictures present a great variety of the natural bits, which have been caused by pushing and driving and dragging, and discharging and upheaving of nature's forces, creating glaciers and icebergs, and drifts and masses, and pictures grand to look upon, all inspiring, and creating in the breast most earnest desires to see and know more about where they grew.

Not only do we have these lovely bits of nature, which fill the mind with a most profound and poetic feeling and aspiration, but we see here and there, locked up among them, the noble vessel which carried our traveller and his party into the region of coldness. Here and there groups of travellers and natives, snow-bound or ice imprisoned, or else again engaged in the active pursuit of the huntsman, fighting for life with the great monsters which are seen in those strange regions. We of course became greatly interested in Mr. Bradford's pictures, and could fill our magazine this month in their praise, and in descriptions of them, but perhaps a few details concerning his excellent lantern exhibition will interest our readers the most.

We will leave his masterly paintings to the imagination, knowing full well that we cannot give any idea of their intrinsic value or beauty. After the exhibition of his paintings, Mr. Bradford delighted his audience for nearly two hours, exhibiting to them from photographic views made by himself, nearly one hundred splendid transparencies of the people in the cold regions named, of their houses, their means of living, and, above all, the magnificent scenery which is to be found among the ice kings and frost fairies of the fiord and berg.

Mr. Bradford is not only a splendid painter, but an enthusiastic photographer. He was one of the first painters to perceive the value of photography as a helper to the painter. As early as 1863 he fitted out an expedition to the Arctic regions, taking with him two of our old subscribers, Mr. John B. Dunmore, of Black's studio, in Boston, and Mr. George B. Critcherson, of Worcester, upon that eventful occasion. More than seven hundred negatives were made of studies of the coast scenery, of the people, of the fleet, of the travellers, of animals, and the eccentricities of the icebergs, and what not, pertaining to the perilous life in the Arctics.

In conversation with Mr. Bradford he admitted most gladly the great service which photography had been to him. He commented upon the systematic scouting at the idea that photography could help them, indulged in by artists a few years ago, very severely, and, as he warmed up to the subject, he said enthusiastically, "Why, my photographs have saved me eight or ten voyages to the Arctic regions, and now I gather my inspirations from my photographic subjects, just as an author gains food from his library, and I could not paint without them."

"Only a short time ago," he said, "I employed a steam yacht, and followed a whaler from New Bedford a great many miles out to sea, making instantaneous views of her, in various positions and changes of light and shade, and gathering into my stock studies which will be worth their weight in gold, to say the least." The more we conversed upon this subject, the more enthusiastic Mr. Bradford became, and he comed to exhibit his lantern transparencies with the pleasure

and enthusiasm of a real photographer, describing them eloquently, as he did the production of his own special genius spread over the canvas in the art gallery below.

Mr. Bradford's example has had much to do with inspiring other painters with respect for photography as a help to them, so that now it would be a little difficult to count the number of artists who employ our art to assist them in the production of their splendid results. It is therefore but proper that this fact should be recorded and sent down to posterity within the pages of the photographic magazines. Certainly we are very glad to add our praise, not only, but our thanks for the persistence with which Mr. Bradford has for so many years stood up for the advantages of our art.

THE AIR-BRUSH.

THE Air-Brush Manufacturing Company, of Rockford, Ill, have issued a price-list and description of an air-brush manufactured by them, of which the following diagram is a



correct drawing. The principle of the airbrush is to supply, by means of a treadle, and a most ingenious bit of apparatus, whose construction is not seen by the cut above, a substitute for the crayon, brush, pencil, and so on, in various ways. A liquid pigment, so to speak, if placed within the precincts of this little piece of apparatus, a current of air being passed through in a certain way, and

controlled in an ingenious manner by the skill of the operator, drives the fine pigmented spray in quantity and direction to suit the desired end. Not only can any liquid pigment be used, but India ink, water color, crayon, and pastile.

Retouching may be managed with it to great advantage. It is so completely described in the pamphlet alluded to, that we need but to tell our readers of it, and they will doubtless possess themselves of a copy. We have seen its operations, have before spoken approvingly of it, and can cordially state that it will be found exceedingly useful to those who learn to handle it properly. No doubt it will become a most helpful adjunct to the artists' department of our wonderfully growing art.

DOTS OF THE DAY.

ONE of the most important points connected with Mr. Commons' beautiful photograph of the nebula of Orion, and the map of the heavens around it, is that years hence astronomers may regard it as an infallible record, and so note any changes that occur in this group of heavenly bodies. Says Nature, very truly, "An astronomer hereafter will prefer the single photograph taken by Mr. Commons in thirty-seven minutes, to all the literature of the subject so admirably brought forward by Prof. Holden, and if the world must in the mean time lose either the memoir and records of human effort of two and a half centuries on which it is based, or the photograph, then it is to be hoped the photograph will be spared."

The life of an inventor is not always a happy one. The following anecdote, told by Mr. Dumas, the eminent secretary of the Academy, was repeated by Mr. Felix Hément, appointed by the Minister of Public Instruction, in his discourse at the inauguration of the monument raised to Daguerre:

"It was in 1827," said Mr. Dumas, "I was a young man then, hardly twenty-seven years of age, and whilst in my laboratory I was told that some one wished to speak to me. I found the person to be Madame Daguerre. She came to consult me about

the investigations which her husband was making; she feared he might be unsuccessful, and did not hide from me her fears for what the future might have in store for her. She asked me if there was any hope of ever seeing the dream of her husband realized; timidly adding, 'Don't you think it would be right to have a commission of lunacy appointed?'

"I replied that, far from this being the case, the investigations of Daguerre seemed to me to be in the right direction, and that the end he sought might be attained. A short time afterwards, I had the satisfaction to see that I had not been mistaken: Daguerre had found the solution of the problem—a solution which has made him celebrated."

"See," smilingly said the orator, "what an inventor may expect, after laborious investigations, sleepless nights, and privations, to be declared non compos, and a fit subject for a mad-house."—Revue Photographique.

PHOTOGRAPHERS should beware how they employ foreign assistants who are not familiar with the English language. Only the other day we heard of a gentleman who felt himself insulted in a studio because the assistant took a profile, naively giving as a reason to the customer, that he did not like his fool face.—Photographic News.

This reminds us of the lady who inquired of one of our best photographers whether he made cranium (crayon) pictures.

PHOTOGRAPHY AS A WEATHER PROPHET.

Prof. Piazzi Smith has discovered in the atmospheric spectrum a rain band.

By means of emulsion plates the atmospheric spectra are photographed at different intervals during the day, and from the images produced the indications for the weather may be made.

It was a beautiful afternoon. A peasant entered the gallery and expressed the desire to have his picture taken. The good man was properly posed and the camera directed at him, with injunctions to sit perfectly still and motionless. The negative was soon taken, and carried to the dark-room to un-

dergo the subsequent operations. Meanwhile the hour of lunch had come, in the enjoyment of which the poor countryman was entirely forgotten. After the lapse of an hour, I returned to the operating-room, and found him still sitting in the attitude he had first taken, having scarcely winked or moved during the whole time. "Oh, my friend," says I, "you may arise, the operation is complete." "What!" says he, "is the picture really done already? Who could believe it were possible?—Photographisches Archiv.

HER PHOTOGRAPH.

I know the photographer pinned
A little white card on the screen,
When he wrapped up his head in a cloth
And focussed his picture machine;
And as he turned back to the chair,
I am equally certain that he
Said, "Won't you look right at this card?"
Yet she seems to be looking at me.

And after arranging her chin,
And twisting and turning her head,
And adjusting the folds of her dress,
I am sure the photographer said,
"Now, please for a moment sit still,
And smile, till you hear me count three,"
As he whisked off the camera's cap;
Yet she seems to be smiling on me.

I presume she thought it a bore,
And that she was quite ill at ease;
Saw little black specks in her eyes,
And felt a temptation to sneeze;
That she wondered how long it would take,
And what sort of picture 'twould be;
And yet, when I look at the face,
She seems to be thinking of me.

And when the brief seconds were passed,
And the artist had said, "That is all,"
I presume, as she rose from the chair,
She only said, "When shall I call?"
But the message that waits on these lips,
That smiling, half-parted, I see,
Is as sweet and as fair as her face;
And it seems to be waiting for me.

-Lite.

Mos vics for 1884 is immense,

THE G. CRAMER DRY-PLATE WORKS.

ONE of the most interesting experiences we have had for a good while was the recent visit to the extensive dry-plate works of Mr. G. Cramer, in St. Louis. Long before we reached the place, it being located near the outskirts of this wonderful city of the west, we discovered two tall smoke-stacks towering up as though from the deck of some invisible steamer at low water, considerably below the surface of the levee. Between these tall minarets swung a sign bearing the title of this article. As we neared the establishment we confess to a feeling of disappointment, for instead of the large and extensive laboratory which we had anticipated, we saw but a squatty group of buildings, but one story high apparently. After we had made our visit we were convinced of two things: That although Mr. Cramer's establishment was not three stories high, it was quite three stories low; and all jokes aside, that he had run the dry-plate business considerably into the ground.

The site of his factory is admirably chosen. A depression of some twenty feet among the hills was found, partially filled with water, which, being drained, and walls sunk to the depth of some twenty feet, here the new factory for the production of dry plates was located. By this means darkness and coolness were secured at moderate expense, and good ventilation was had by a system of machinery which pumps the fresh and cool air within all the apartments in quantity sufficient to secure the right temperature, and preserve the health of the operatives.

Entering the ground floor, or floor above ground, of Mr. Cramer's establishment, we were ushered into his office, and shown many examples of fine work hanging from the walls, made by various photographers, freshly arriving each day; from there we were conducted to what he called his "store-room". It was filled with empty shelves! When we observed that we did not see much "store" there, Mr. Cramer asserted that it was impossible to get enough stock ahead to use shelves at all. In one corner of this floor was a neatly accourted skylight, where trials of plates are made, but as nothing of particular interest was found there, we hastened

to the regions below. As we passed to the stairway we saw the puzzled clerk discussing the great order book which lay before him. He was counting the quantity of the orders that he had ahead, and by actual count, they amounted on that day to two thousand one hundred and twelve dozen of various sizes. Mr. Cramer declared that he was six weeks behind with his orders.

A peep now into the dark-room, which was lighted by ruby light, and then into the shipping-room (where sundry lots of goods were being carted away by the teams to the railroads), and then into the depths. Mr. Cramer met us at the foot of the first stairway, took us by the hand, and immediately led us into one of the dark quarters of his lower establishment.

The first room visited was the laboratory, where the emulsion was made three times a day, and where stood great rows of pitchers full of bromide and of silver, ready for action. Here were cooking and cooling boxes, also in considerable number, and varied machinery for washing, changing, and mixing the emulsion, to say nothing of the various other apparatus used in the preparation of the emulsion.

Another dark entry was passed through, when we reached the largest darkened apartment of the whole, where the process of coating, drying, and cutting the plates took place. The men looked like demons, running around in their shirt-sleeves and carrying ruby lanterns with them, or seated at their benches as they coated the plates with the emulsion. Here were eight busy men, with pitchers of emulsion on one side, and a pile of glass on the other, and in front of them a peculiar levelling stand. The expert eye directed the hand as it poured just sufficient emulsion upon the surface of the already clean plate to coat it the proper thickness. It was poured upon one end, and then flowed back towards the hand by a little different motion from that adopted by the old collodion flowing. Very little was allowed either to overrun or to go upon the back of the plate. This latter was prevented by an arrangement peculiar to Mr. Cramer's levelling stand.

After the plates were coated, they were replaced upon a movable belt, which carried them slowly into a neighboring room, found, upon entering, to be darker than two coal mines, where the plates were chilled and afterwards dried.

Now down again into a lower floor, and we came to where the glass was cut and cleaned. Here twelve men were working, sorting and cleaning about eight thousand plates of glass per day, dipping them into acid, removing them from the same, washing, packing, and detecting as they went along—a lively scene indeed. Fifteen hundred boxes of glass per month are used here.

After the plates are coated and dried as stated above, they are carried by a dark elevator to the room which we visited, where they are inspected, carefully cut, and packed. Here the process is more interesting than the few words of description which we give would indicate. There are nine busy men actively at work in the various departments we have mentioned. Upon those men hang more reponsibility than any other set, because they finally pass upon the plates and prepare them for the market. Here, as we have said, they are packed in paper boxes by two or three methods, sealed, wrapped, and labelled, thus to remain until they are opened by the expectant photographer in some distant part of the country or earth,

In the matter of health, Mr. Cramer declared that so complete was his system of ventilation, that his men did not suffer at all. The only man he ever knew to become sick at any time was one of his emulsionists, who one day drank a quantity of emulsion. The man's wife had brought him his dinner accompanied by a cup of coffee with milk therein, which the aforesaid emulsionist had poured into a clean bowl used for flowing emulsion, and placing it by the side of a bowl of emulsion, he mistook the latter for his coffee and took a good swallow. He did not detect his mistake until he was about to attempt the process again, when, upon his discovering what he had done, he grew suddenly sick, and as a consequence lost a portion of the dinner so far proceeded with. He has not been known to repeat the process since, and now smiles over the little joke he played upon himself, glad that he is alive.

Thus it will be seen that Mr. Cramer has a most complete establishment, badly described, because seen indistinctly by the aid of ruby lamps, yet we trust that description enough has been given to interest our readers. In addition to the conveniences we have named, the most complete apparatus is provided for heating the establishment, and running its machinery by steam, and for obtaining distilled water, hydrant water, and well water. A large fire-proof holds the nitrate of silver stock. The ventilating arrangements are perfect.

I forgot to say that all the air admitted into the establishment from the outside goes through an ice-box, and is then received by a fan, which drives and diffuses it into the various apartments below and at the side.

All the modern conveniences and means are supplied, such as a fire alarm, telephone, and telegraph. From what little we know of such establishments, we should pronounce this a model one, and as a sequel to it all we have but to point to the ample reward which Mr. Cramer is receiving as the result of his enterprise. There are so many of our readers better acquainted with the quality of his manufactures than we are that it would be superfluous for us to add one word in their praise. His results have been seen, too, by all of our readers, as they have from time to time appeared in our magazine. We wish him the great success that he deserves.

GERMAN CORRESPONDENCE.

American Photographic Views in Germany
— Wilson's Eguptian Pictures—Taber's
and Jackson's Landscape Works—Collodion vs. Gelatine—A New Rapid Collodion
Process.

The end of October finds me in the best of health and spirits, again in my German home, the Imperial City of Berlin; and I take the opportunity with the renewal of my old correspondence with the Philadelphia Photographic a duty which has become to me a plea ure) to express my heartfelt thank to my numerous friends in America, who so heartly received and entertained me. Unfortunately my stay in that country was too brief for me to avail myself of all the friendly invitation I received. It especially grieved me that I was obliged wholly to give up my intended visit to Beston, which

would have given me the greatest pleasure. I hope my friends there will not be angry with me.

Now that it becomes my task to tell of that which is of the greatest photographic interest in Europe, I must confess that the latest here is what I brought with me from America. Not a little surprised were my friends, when I placed before them, not pictures from the "Far West," but from the "Far East," and from the "Far East" of the old world. Indeed, it is strange that the best pictures in the old world of the "Far East," that is, of Egypt and the Holy Land, are to be found in the new world, and especially in Philadelphia. I refer to the beautiful productions of Mr. Edward L. Wilson, of that city. These pictures, of the utmost interest, are as yet totally unknown in Europe. They merit double attention, not only on account of the excellence of their quality, but also from the fact that Mr. Wilson penetrated into wild and savage regions in which, since his journey there, no European traveller has had courage to venture his life on such risks. Much has changed in Egypt since Mr. Wilson's return. The revolution has overthrown and demolished many places associated with the history of the past. Hence many of the pictures of his magnificent collection are, and will continue to be, of the greatest historical interest. I am sure they will excite here the same attention they have aroused in the United States.

I am obliged to make an immense leap from the "Far East" of the old world to the "Far West" of the new. I may be pardoned for reminding my readers, as I have so often done, of the giant leaps photography has made in more recent times. At any rate, the "Far West" of America, in the production of immense landscape pictures, is leading the van of progress. Formerly, Watson and Muybridge and others confined their labors to the wet process. Now the accommodating and obliging dry plate offers its acceptable service, and materially lightens the labors of the photog-The magnificent views of the Colorado Alps, by W. H. Jackson, have excited much attention here. He has succeeded in taking immense pictures on an imposing

style (eighteen by twenty inches). scenery represented is but little known in Germany, and has, therfore, aroused great interest, making these pictures at once charming and instructive. On my visit to Mr. Jackson, in Denver, I was shown the most magnificent collection of landscape photographs I had anywhere ever seen. The whole West has yielded its treasures to the skill of this artist, even the Yellowstone National Park. Unfortunately the pictures of the Yellowstone Park, at the time of my visit to Denver, had not yet all been copied. These pictures are probably the largest which have ever been made. In like manner the pictures from the first-class ateliers of San Francisco excited the admiration of my countrymen. The productions of Taber, the celebrated portrait and landscape photographer, claimed here undivided attention, especially since they were taken with Henderson's emulsion. These plates of Mr. Taber's, from recent trials I have made, exceed in degree of sensitiveness all others: and I must add that Mr. Taber's instantaneous pictures, noticeable among which is that of a cannon shot, are patterns for the profession. It is a shame that these very interesting pictures were not shown at Milwaukee. I believe they are not even known in Eastern America to the extent they deserve. It may be safely said that along with the rapid progress in the far West of America during the last ten years, photography and photographers have played a very prominent part. As an evidence of the great interest manifested in American photography and photographers, I may mention that I was compelled to share the collection I brought with me. By request I have sent a portion to my much esteemed colleague at Vienna, C. Schwier, editor of Photo Notizen. The pictures will be brought before the association held there. I shall return later to the same subject, but meanwhile will inform you of some European novelties.

During my visit to America I was repeatedly asked whether the opinion was prevalent in Europe that the new gelatine process would expel the old collodion method. I know an answer in the affirmative was always expected, but I might point to the fact that even in America there are many

The | photographers who use with protest the dry plate. I might mention the great galleries of Rieman and Bradly & Rulofson, in San Francisco; also Mosher, in Chicago; and others. I am certainly of the opinion that the use of the gelatine plate has made great progress; that the facilities in manipulation in portrait and landscape have been greatly increased by their use, so that photographic feats are now possible in the shape of instantaneous pictures which were never dreamed of before. Yet we must be fair and acknowledge that the quality of the negative by the gelatine process has not excelled the quality of the negative by the wet process. We only make pictures just as good as formerly, never better ones. In Milwaukee, I found photographers who were still enthusiastic over the old collodion process, and they are to be found here also. One of our first photographers, Ruckwardt, works with collodion only, and obtains wonderful results. Far be it from me to denv the importance of dry plates, even in the least particular, but I do not believe that they will ever finally drive out collodion plates for certain special operators, and for such it will ever keep its value. The photographing of oil paintings, which has become an important business in Germany, on the other hand, increases the value and importance of dryplates, on account of the danger incurred during the long exposures of the drying of the collodion plate. Hence, the copying of paintings can be done more safely and easier with dry plates. That the day for the departure of collodion plates has not yet come may be shown, among other circumstances, by the fact that a patent has been taken out recently for an improved collodion process, a modification of the old tannin process. It originates with the Brothers Möhler, in Holstein. The following is a description:

A plate flowed over with iodized collodion is dipped in the silver bath, as usual; it is then taken out and immediately, without washing the excess of silver from it, flowed over with a weak solution of tannin (about 1:100), or a solution of any of the so-called organic sensitizers; the plate is then placed in a horizontal position so that the tannin solution may come equally in contact with the nitrate of silver. This is con-

tinued until it is supposed that the mixture is uniform all over the film. After about half a minute the plate is thoroughly washed in pure water, so that all soluble substances are climinated from the film and laid a short time in water. The film is now very sensitive to light. After exposure the plate is developed with an alkaline developer. The oxalate of iron developer used in the gelatine process seems to be the best for the purpose. The image, if the time of exposure has been proper, shows itself almost suddenly, and soon attains the necessary detail. faintest image, often scarcely perceptible in the transparent parts, may be intensified by the ordinary pyrogallate of silver intensifier, the strength required is soon attained. The unaffected silver iodide is eliminated in the hypo bath. Even if the plate is washed from the excess of nitrate after coming out of the silver bath, and flowed over with tannin, the film still possesses the above virtues, but in a less degree. The highest degree is obtained by dipping the plate in the silver bath until the usual greasy strice have disappeared; and then immediately flowing it over with the tannin solution, which has been just previously treated to a strong nitrate of silver solution. It is even possible to supply directly the iodized collodion with the tannin, but this does not seem to be an advisable procedure, because the silver bath is soon contaminated thereby. Of all the so-called organic sensitizers which have been used, tannin comports itself the best. The solution within certain limits may be made strong or weak (1:50 or 1: 500% the results are much the same. To judge from the above, it would seem that the iodide of silver of the film entered into a triple combination with the sensitizer which is of organic nature, hence making it very sensitive to the influence of light. Iodide of silver alone in the film, as in the new process, freed by washing from uncombined nitrate of silver is, so to say, entirely un-The advantages of the new method are essentially as follows:

- 1. These plates have from four to five times as great sensitiveness as the ordinary plates.
 - ? The prepared plates, if kept in pure

water and in a cool dark place, may be kept at least a whole day without change.

- 3. The image produced has a beautiful brown tone—fine, soft and of great power.
- 4. The glass plates need not be as clean as is necessary with the ordinary collodion process. Such faults as result from want of cleanliness are not observed. All that is necessary is to wash them in clear water, and rub them dry; even plates that have been used may be employed.
- 5. Collodion and silver baths, which are worthless in the old process, give for the most part very good results with the new.

The principal difference between this process and the old one lies in the circumstance that the Möhler Brothers bring the tannin in direct contact with the unwashed film containing the free nitrate of silver.

Very truly yours,

H. W. YOGEL.

BERLIN, November 30, 1883.

SOCIETY GOSSIP.

Photographic Society of Philadelphia.—The regular meeting was held on Wednesday evening, December 5, 1883. The President, Mr. Joseph W. Bates, in the Chair. Forty members and four visitors were present.

The minutes of the last regular meeting were read and adopted.

The Committee on Reception in celebration of the twenty-first anniversary, reported that the reception was held at the rooms of the Penn Club, on the evening of November 26th, that being the date on which the Society was organized in 1862. The invited guests included the Active, Life, Honorary, and Corresponding Members of the Society, and a number of other persons interested in photography. The evening was a rainy one, which probably prevented the attendance of some of the guests, but the occasion afforded much pleasure to the participants, and brought together some of the older members who had not met for years.

The following gentlemen were elected members of the Society: Messrs, Robert E. Glendenning, Edgar P. Earle, Jesse Walton, De Witt C. Williams, and George Yaux, Jr. Seven applicants for membership were proposed for election at the next meeting.

Dr. Jordan presented the Society with a handsomely framed copy of his "Scene on Blue Creek, W. Va.," the photograph which was awarded the first prize at the exhibition held November 15th by the Boston Society of Amateur Photographers.

Mr. Browne read a very interesting historical sketch of the Society, from its organization, November 26, 1862, to the present time.

On motion of Mr. Coates, the Executive Committee were instructed to ask permission to publish the sketch in pamphlet form.

The Question Box contained the question, "Does the mercury solution for intensification lose any of its virtue after being used some time?" The general experience seemed to be that though it could be repeatedly used for a long time, the mercury was gradually exhausted.

Dr. Jordan asked if it made any difference whether the bromide of potassium or of ammonium was used in the developer?

Mr. Fox said that the effect was the same with either.

Mr. Carbutt said that the proportion of bromine was greatest in bromide of ammonium, ten parts of which would equal in effect twelve parts of bromide of potassium.

Mr. Thomas Eakins, who was present, showed the Society an ingenious exposer for instantaneous work. Two equal weights attached to cords of different lengths, were dropped simultaneously. When the weight on the short cord had fallen as far as the cord allowed, the tension released a slide which uncovered the lens. The exposure continued while the other weight was falling. When the end of its string was reached, it in turn released a second slide which covered the lens. By altering the length of the second cord, in accordance with a table he has prepared, changing thereby the distance the weight is allowed to fall, Mr. Eakins can accurately vary his exposures from one-quarter to one-hundredth of a second.

Mr. Browne showed some platinum prints made from a gelatine negative, before and after intensifying the same with Willis' new Strengthener. The advantage claimed was that its effects were unalterable.

On motion, adjourned.

ROBERT S. REDFIELD, Secretary pro tem.

Association of Operative Photographers, 392 Bowery, New York, December 5, 1883. President Charles Shaidnor in the chair.

The British Journal and London Photographic News, were received with thanks.

The literary committee proposed for discussion "Enlargements" by direct operation, by diapositives, the solar camera used with bromo-gelatine emulsion paper.

MR. T. E. RODER, by request of the Association and permission of the Messrs. Anthony, had consented to favor the Association with his knowledge and experience in the latter process. He said that bromo-gelatine emulsion applied to paper as a coating, is, as may naturally be presumed, capable of making a print from a negative in an incredibly short time, even by artificial light. Such paper exposed under a cabinet size negative of average intensity, yielded strong and vigorous prints when exposed to the flash light of a tuft of gun-cotton or a lucifer match just being ignited. After exposure the paper has of course to undergo a development, for which purpose ferrous oxalate must be used; viz.: saturated solution of neutral potassium oxalate, nine ounces; of a saturated solution of ferrous sulphate, one or two ounces, and one drachm of a solution of bromide of potassium, one in twelve. As a good transparency can be made from a good negative, an equally good surface print must result upon a gelatine film spread upon paper. The process is very simple, and cannot fail to work well in the hands of an operator of average ability and experience. The development is quite equal to that of a negative with ferrous oxalate, but must be modified to some extent. The restraining property of the potassium bromide plays a very important part; it makes the print black; without it only gray and feeble copies would result. More bromide than with a negative can be used with impunity. The same refers to the iron solution; more of it must be added when the process goes on too slowly. In a great measure this process reminds one of the development of ferrotypes, and it is the skilful and ingenious operator who will be able to judge how to regulate and how far to proceed with the development. must bear in mind, that in the positive gelatine process, the image received lies only on the surface of the film, while in the negative we require the chemical reaction to go beyond that, and even to penetrate the film entirely; hence the quicker action of the developer when a positive only is required. An attempt to carry the development further will destroy all details, the same as it appears in a properly developed negative before fixing, when all details are lost to view by reflected light.

An enlargement of a carte-de-visite head to life-size, was then made with a half size Harrison objective, half-inch stop, and the hydro-oxygen calcium light.

Exposure, three seconds, over-exposed. Exposure, two seconds, over-exposed. Exposure as quickly as would be done by hand, correct.

A perfectly well exposed print, black in the deep shadows, and with all the finer modulations and gradations of tone, was shown and received the most enthusiastic applause of the audience. Enlargements on bromo-gelatine paper are now very frequently made for artists' use. For that purpose the finished print is matted down by means of finely levigated pumice-stone or cuttle-fish bone.

Mr. Atwood now introduced Mr. F. C. Beach of the Scientific American, who exhibited a number of photographs he had lately received from Europe. They were positives on gelatine paper, made from negatives on gelatine paper which were made transparent after the development, fixing, and washing had been completed. The mode of making the negative transparent will be given some other time, Mr. Beneit not having the formula for it on hand

ME BUILLER howed everal enlargements made with "Ven Monkhoven's Heringtate." Some of them twenty-four by thirty, republiced from stereograms and others, e-pecially an enlarged map

composed of fifteen sections, revised from the original by prismatic action and magnified to one to eighteen surface. These prints received the highest praise.

Mr. Grenier remarked that when making enlargements a difference is observable in the measurement, comparing the image as seen on the ground glass with that of the negative or positive print, and thinks that a shrinkage takes place in the film, which becomes manifest on large plates to the extent of half an inch on a twenty-two inch plate.

Mr. Buehler had never experienced anything of that kind. A shrinkage of the film he had observed on plates of any process, even when photographs had to be made for astronomical purposes, and which had to be subjected to the scrutiny of a mathematical calculation.

Mr. Rocher believed that a shrinkage could not possibly occur, especially when a proper substratum was used. He rather thought that differences, as mentioned, might take place in consequence of using smaller stops in exposing them for focussing. In Moss's photo-engraving establishment, a rule allowing for a difference of one-thirty-second of an inch to the foot is invariably used, and with it correct results are obtained. He did not doubt that a reduction in size takes place when a smaller stop is used for exposing.

Messrs. E. Rockwood, Murphy, Beach, Field, Grenier, and Ehrmann discussed the subject further, and were divided in opinion as to whether the stops affect the size of the image.

Mr. Atwood moved that a vote of thanks be rendered to Messrs. E. & H. T. Anthony & Co., Mr. T. E. Rocher, and Mr. F. C. Beach, for kindness and attention shown to the Association, which was carried.

The subject for discussion not being exhausted, the President announced that it would be continued at the next meeting.

Adjourned.

CHARLES EHRMANN,

Secretary.

Photographic Mosaics for ISS4 are nearly all gone. 141 pages for 50 cents.

EXHIBITION OF AMATEUR PHOTOGRAPHY.

THE Boston Society of Amateur Photographers at its first meeting this fall, voted to hold a competitive exhibition open to all amateur photographers, whether members of the Society or not, and as soon as definite details were arranged, invitations to compete were sent to amateur photographers in other cities so far as possible.

The principal rules governing the exhibition were, that all competitors must be amateurs; and all negatives from which the prints were made, to be developed by the exhibitor. All prints were to be divided into two classes, A and B. Those entered in Class A being entirely amateur work. The printing and toning of those entered in Class B, might be done by professionals. The entries were to be accompanied by a sealed envelope containing the name of the sender, so that all prints should be exhibited anonymously until after the decision of the Judges. Each print was also accompanied by a tag printed as follows:

Number,
Lens,
Focal ength,
Diameter of stop,
Exposure,
Plate,
Developer,
Printed by,
Subject,

Which each exhibitor was requested to fill out as far as possible; a request which was very generally complied with.

The exhibition was held at the Institute of Technology, where the Society meets, and was open to the public from 3 to 10 P. M., Thursday, November 15th. Over seven hundred pictures were exhibited, varying in size from minettes to 18 x 22 prints; and the room was full almost to crowding the larger part of the time. Arrangements for displaying so large and varied a collection had not been made, so that some prints did not receive the attention from the public that they deserved. The Executive Committee assure us that they have learned wisdom by experience,

and at the next exhibition of the Society, ample provisions will be made for all.

The successful contestants were as follows: The best print exhibited in Class A, was contributed by Dr. J. M. Jordan, of Philadelphia, he receiving for it a diploma. It was an attractive scene on Blue Creek, West Virginia. The tag accompanying the print was as follows: Lens, Ross Portable Symmetrical; exposure, ten seconds; plate, Cramer; developer, pyro.

The developing solution used by Dr. Jordan was as follows:

Solution No. 1.

Distilled Water, . . 10 ounces.
Sulphuric Acid, c.p., . 60 minims.
Pyro, . . . 1 ounce.
Ammonium Bromide, . 180 grains.

Solution No. 2.

Solution Sulphite, . . 2 ounces.

Potassium Bromide, . 6 drachms.

Concentrated Ammonia, . 1½ ounce.

Distilled Water, . . 10 ounces.

To use, take two drachms of No. 1, two drachms of No. 2, six ounces of water.

For over-exposure do not increase the amount of water, but add more bromide of ammonium. For under-time increase water to ten ounces, and allow a very long development. The density of the negative will be in exact proportion to the amount of water used.

The toning bath was

Chloride of Gold, . . 3 grains.
Warm Water, . . . 24 ounces.
Chloride of Sodium, . 1 ounce.

Enough saturated solution of sodium carbonate to make solution alkaline.

Mix in the order named, and do not use for ten minutes after mixing.

The next best print in Class A was made by Mrs. J. H. Thurston, of Cambridge, and was one of a collection of seven interiors, all arranged on a 24 x 28 chocolate mount. The tag with this print indicated that the lens used was an 0 Euryscope; diameter of stop, three millimetres; exposure, twenty minutes; plate, Blair instantaneous; developer, ferrous oxalate. The developer was not acidified; was mixed in proportions of one to five; and about one-fourth of old developer added. The toning solution was the simple chloride of gold with a few drops of bicarbonate of soda; about one grain of gold being used for each sheet of paper. A few drops of ammonia added to the hypo have always proved an absolute preventive of blistering.

The first prize awarded in Class B was for one of a collection of four residences, entered by Mr. W. B. Lace, of Boston. The one selected by the Judges was a view of the residence of F. L. Ames, Esq., of North Easton, and was made with a Darlot Rapid Hemispherical lens; focal length, ten inches; diameter of stop, three-sixteenths of an inch; exposure, one and a half seconds; plate, Eastman special; developer, pyro.

The second prize in Class B was given to Mr. Theo. Dunham, of Irvington, N. Y., now a student at Harvard University. It was of a collection of bric-a-brac. The exposure was made in a studio with a Dallmeyer lens; stop, seven-sixteenths of an inch; a Cramer plate and oxalate developer being used. The developer was mixed in proportions of one to six; and the plate fixed in a mixture of hypo and alum.

These four awards completed the list as originally decided upon by the Society; but the Judges wished to call particular attention to several additional entries, and certificates of honorable mention were granted as follows:

In Class A, to Miss Nina M. Sumner, of New Bedford, Mass., for greatest excellence in composition. This was for a "sunset landscape with old poplar tree." The particulars accompanying this were: Lens, Steinheil No. 2; focal length, five and a quarter inches; diameter of stop, five millimetres; exposure, two seconds (at sunset); plate, Richardson instantaneous; developer, oxalate. The oxalate was acidified with oxalic acid, and the iron with a few drops of sulphuric acid. The toning solution was made with

Chloride of Gold,	11 grains.
Chloride of Calcium,	40 0
Salt,	20
Saturated Solution of Sal Soda,	o drops.
Water,	
AND DESCRIPTION OF THE PROPERTY OF THE PROPERT	,

To M. D. Hartwright, of Revere, Mass.,

for full-length portrait of a lady. This was made with a Voigtländer lens; focal length, eighteen inches; diameter of stop, one inch; exposure, four seconds; plate, Cramer; developer, pyro.

In Class B, for general excellence in posing, to Mr. Edward Cohen, of Philadelphia, for picture of little girl holding a cat. This was a Walker view lens; focal length, five inches; diameter of stop, one-half inch; exposure, two seconds; plate, Carbutt special; developer, pyro.

The developer used by Mr. Cohen is the "modified ten per cent. pyro developer," prepared as follows:

No. 1.—Make a saturated solution of carbonate of soda by dissolving one pound of soda in one pint of hot water.

No. 2.—Make a saturated solution of sulphite of soda by dissolving a quarter pound in one pint of water.

Mixed solution.—No. 1, five parts; No. 2, one part.

Make a ten per cent. solution of pyrogallic acid by dissolving one ounce of pyro in eight ounces of water. Add a quarter of an ounce of oxalic acid, then add water to make ten ounces of liquid.

Make a ten per cent. solution of bromide of potassium by using forty grains of bromide to one ounce of water (use with dropping tube).

To develop:

Instantaneous Pictures.

Wat	ter,				$2\frac{1}{2}$	ounces.
Mix	ed Sol	utic	n,		$\frac{3}{4}$	ounce.
Pyr	0,	٠			1	drachm.
Bro	mide,	٠			12	61

Time Pictures.

Water,				$2\frac{1}{2}$	ounces.
Mixed S	olutio	n,		12	ounce.
Pyro,			4	12	drachm.
Bromide				l,	66

If image does not come up within a reasonable time, add mixed solution; for density, bromide; for bleaching, use alum and oxalic acid as follows:

Pulverize	d Al	um,		2	ounces.
Oxalic Ac	oid,			1	ounce.
Water,				20	ounces

Use before flxing.

For best interior, to Mrs. Walter Burgess, of Boston. This was one of three made with a Darlot Wide Angle No. 3; exposure, twenty-five minutes; Eastman special plate, and oxalate developer.

For best group of animals, to Mr. A. W. Cutling, of Wayland, Mass., for group of cattle. This was the central picture of a collection of about twenty prints, comprising a variety of subjects tastefully grouped and neatly framed, forming an attractive portion of the exhibition.

Over seven hundred prints were exhibited, many of which were of a high order; consisting of groups, single figures, landscapes, flowers, interiors, and in fact almost everything which photography produces. The larger portion was entered in Class A, where the best work was found; as that done by amateurs was equal, or superior in every detail to that done by professionals.

The great variety of subjects and large number of prints, made the task of the Judges avery difficult one; and the thoughtful and conscientious manner in which they performed their work received much praise from those present. There were three appointed: one professional photographer, one artist and engraver, and one non-exhibiting member of the Society. The gentlemen selected were Messrs. Baldwin Coolidge, C. A. Walker, and F. W. Chandler.

It was almost impossible to select any prints for special mention; but aside from those already noticed, the following were perhaps the most attractive: A large head by Mr. Cartwright, whose work has already been referred to, was made on a wet plate, and for this reason was ruled out by the Judges.

Several large "blue prints" by Mr. Lewis were conspicuous; not for their size (eighteen by twenty-two), but for their excellence as blue prints.

Four prints contributed by Mr. Redfield, of Philadelphia, were far superior to most of those present. One of them, a "View at Atlantic Beach," being almost the only instantaneous view exhibited.

A group of four persons seated on the ground with feet toward the camera, attracted much attention. This was made with a wide angle lens placed near the subject; the result being that the figures were

almost wholly obscured by the apparently abnormal size of the feet.

Among the collection sent by T. Sedgwick Steel, of Hartford, Conn., author of Canoe and Camera, were several of historic interest, such as Elberon Cottage at Long Branch, in which President Garfield died; John Brown's Home in Virginia, and another of his grave.

A few platinum prints and several on plain salted paper were exhibited. A collection of flower studies by Miss Sumner was also very good. Dr. Jordan, to whom the first prize in Class A was awarded, contributed eleven prints, which were almost universally conceded to be the best shown. All were 8 x 10 prints, tastefully mounted on thick bevel-edged cards. A variety of circles grouped together on a large mount, also attracted much attention.

Excellent transparencies were contributed by Mr. Redfield, of Philadelphia, and Mr. French, of Boston.

There was a noticeable lack of instantaneous views, which was the more surprising as several in Boston and vicinity have made specialties of this class of work.

An analysis of the tags sent with the prints gives some interesting information. Pyro development seems to take the lead, although the prize prints are equally divided between pyro and oxalate. Almost all kinds of dry plates were used; the leading half-dozen brands being about equally in favor. A fair sample were those entered by Dr. Jordan, who used Eastman, Beebe, Cramer, and Carbutt, in the eleven entries made. Several contributors made their own plates.

The exhibition seems to have been a success in every way, and was the first of the kind ever held in this country. It will probably be repeated annually by this Society.

The Boston Society of Amateur Photographers was organized October 7, 1882, and claims to have been the first purely amateur society formed; although one or two others also claim that honor.*

In the interests of amateur photography,

^{*} The Photographic Society of Philadelphia was the first organized photographic society.

it is to be hoped that other societies will follow its lead in holding open competitive exhibitions.

JOHN H. THURSTON,

Secretary.

AN OPTICAL PHOTOMETER."

FOR COMPARING TWO LUMINOUS INTENSI-TIES COMING FROM ONE LUMINOUS SOURCE.

BY M. LEON VIDAL.

For a long time a system of improvement has been put in practice, which consists in combining together a number of already published ideas, in order to reach a result more satisfactory than any separate applications of these ideas.

In the present case we claim no other merit, and it behooves us so to state it from the beginning of this communication, than that which consists in combining two separate ideas, each good in itself, but offering, when used conjointly, a happier combination.

The phosphorescent photometer invented by our learned and ingenious colleague, Mr. Warnerke, is well known.

In the inside of a copper box is a circular scale formed by tints whose degrees of opaqueness range from one to twenty. This scale has a circular motion, and each more or less translucent division passes before an opening placed at the bottom, and through which passes the glimmer of a phosphorescent plate previously acted upon by light; the whole being closed by a lid having an eye-piece opposite the opening mentioned above. The phosphorescent light permits us, when looking through the eye-piece, to see in succession the lightest translucent tints, then those less light, and so on until we reach a number which can no longer be read. This number indicates the degree of luminosity of the phosphorescent plate, and consequently that of the light by which it has been impressed. Although we were among the first to admit the ingenious-

ness of this system, we must say, that its use is not convenient. The light evolved is sometimes very weak, and the observations made in full daylight are difficult on account of the ambient light. Then it was difficult to read the degree, hesitating between several points, where it seemed that one number could be as well read as another. The idea did not occur to us, whilst investigating this charming instrument, that it could be made more complete, and perhaps more useful, by leaving out the phosphorescent plate, and simply using the direct rays of the light to be measured. But now comes Mr. Simonoff, who has invented an appliance for measuring optically the degree of light.

This instrument consists of a tube, at the end of which is placed a transparent screen on which are letters or numbers. Looking through the tube, it is possible to read these numbers very distinctly, but if, back of the transparent screen, diaphragms of varied and progressive dimensions are made to pass, there comes a time at which the light entering the instrument is not sufficient to allow the reading of the numbers, as they are obscured and invisible. We now ascertain the number of the diaphragm which has produced this complete obscuration, which number gives the degree of light in accordance with the unit which has been adopted.

This is also the very simple and ingenious idea of Mr. Simonoff, but the instrument that we saw is not portable, it is too heavy and large, and too expensive to come into general use. The examination of this photometer led us to seek something more simple and portable, and we hit upon the combination of the two systems, Warnerke and Simonoff.

We removed from the Warnerke photometer the back plate and also the phosphorescent plate; we then uncovered from the back the opening of the inside plate, and covered it with a piece of card made translucent to a suitable degree. This done, on each of the tints of the graduated scale we pasted pieces of very thin paper to render them more opaque. On number one we placed a single piece of paper; two pieces on number two, and finally twenty on num-

The following, from the pen of the great French photographer came too late for Mosaics. That our readers may not be deprived of the valuable information it contains, we insert it here.

ber twenty. It is easy to conceive that these additions greatly increased the opacity of each tint. This being done, the instrument is closed, as in the case of the phosphorescent plate, but without this last and without the back. The eye is now placed on the eye-piece and directed to the side from which the light comes; at the same time the scale is turned, starting at number one. The numbers become more and more obscure until one of them completely disappears; this is the degree.

In the laboratory or operating-room, it is necessary, in order to ascertain the degree of light and to deduce therefrom the time of exposure, to put one's self in the place of the sitter to be reproduced, and to look with the instrument towards the side from which come the luminous rays; through the window, if by such an opening they reach the subject to be photographed. In photographing nature, it is better to turn the back to the sun and always look in a direction directly opposite to the place occupied by it. The idea is not altogether that of Mr. Simonoff, as in his instrument the numbers to be read are not translucent, and they are only seen by means of the light which penetrates all around the opaque screen which they form; and the diaphragms are openings of variable dimensions, so that at any time the quantity of light which enters the tube through the glass or the transparent screen, is not sufficient to enable the numbers to be read. They are formed by printing gilded letters on black paper.

In our arrangement the system is similar to that of Mr. Warnerke; we read the transparent numbers which appear upon screens more or less opaque, and we stop at the moment one of these numbers becomes invisible. As to the result it ought to be the same, but the instrument required to put the method into practice is of the greatest simplicity. As there is no phosphorescent plate, nothing is required but a glass disk, having on it the graduated scale placed between two other disks of thin wood or metal, each having an opening opposite to the other. The under disk is covered with a diaphanous screen made of cardboard or opaline glass. The under one

is made to receive a small eye-piece like that of Mr. Warnerke. This instrument need not exceed a diameter of seven centimetres nor a thickness of twelve millimetres. The eye-piece may also be separate from the instrument, which would then be reduced to a small flat box. A small flat button at the bottom of the box serves to turn the graduated scale on its axis. The construction of the Warnerke photometer, although followed to some extent, is thus much simplified. The instrument is lighter, smaller, and costs much less. It can be used to compare lights coming from the same source, or from several sources of the same nature. It can only be used to make observations that are strictly optical, as two observations, one made on a candle at a very short distance, and the other on solar light, may give the same degree of visibility, but not necessarily with an equal action upon a sensitive product. I would here remark, however, that if observations on solar light, at times at which there is but a slight variation of color, say from eight to ten in the morning, and four to six in the evening, according to the season, very satisfactory practical results may be obtained. There are twenty degrees between obscurity and the greatest light-obscurity which does not permit the reading of number one, and the bright light which allows number twenty to be read Between these limits the error of observation cannot be greater than one degree, which reduces the error to one-twentieth. This approximation is more than sufficient, especially if we reflect that in most case no measure is taken, and errors of one-half or double are made without being perceived.

WHAT OUR ENGLISH BROTHERS KNOW ABOUT US.

WE take the following from the *Photographic News:*

"Instantaneous photography in America, appears to be somewhat of a novelty. The *Illustrated World*, of New York, thinks it worthy of remark, that a photographer should be successful in obtaining photographs of views of objects of interest in and about that city. It observes that one series

illustrates some of the principal features of the ceremonial at the opening of the Brooklyn Bridge, reproduced, of course, with absolute fidelity; the exposure of the plates being so exceedingly brief that the vibrations caused by the machinery of the steamtug on which the camera stood, had no perceptible effect upon the pictures."

"Such photographs," the News remarks, in the supposed smoky atmosphere of England, are of every-day occurrence."

We do not think the News justified in putting such an interpretation on the subject as this. The Illustrated World is perfectly right in thinking it worthy of remark, that a photograph could be taken under the circumstances mentioned; and so would the London Times or any English paper be right in thinking the phenomenon remarkable. But this does not prove that instantaneous photography is such a novelty in We have in our office, any America. quantity of specimens of the finest instantaneous work, both of amateurs and professionals. In fact, it is so common that every country photographer has printed on his signs and cards, "Instantaneous work done here."

But that an impartial witness may testify, we shall quote from a recent letter of Dr. Vogel to his publisher in Berlin.

"Beneath the clear sky of America, quite different instantaneous work is obtained from that taken in the murky atmosphere of Europe. The most astounding things I beheld were the pictures of Lincoln, of Cambridgeport, on seven by nine inch plates, taken by means of Voigtländer's Euryscope No. 3. They represent sailboats—filling almost the entire picture—in full sail, taken on the shadow side; the details are as truly preserved in the lights as in the shadows. The plates were Eastman's. I shall bring copies of these pictures with me."

SENSATIONAL PHOTOGRAPHY.

Arr, like the human organism, seems to be subject to certain deleterious influences which are opposed to its growth and wellbeing.

Among the causes which thus contribute

to its debility or decay is one which originates from an exaggeration of vigor rather than from a lack of energy. As in the animal body, health is the result of full harmony among all the parts, and disease the outcome of the increase of any one function over the other, so in art, the tendency to excess in any special direction, either in ornamentation or in the desire for novelty, is a sure indication of a morbid condition, which, if unchecked, will be the ruin of art.

Sensationalism is a misapplication of vigor. It is that which attracts by its singularity. It refuses to take the proper channels by which alone art can be rendered effective, preferring to create new paths for itself, dissipating its energies over new and untried fields, until it is either absorbed, transformed into obscuring mists and fogs, or becomes standing pools stagnant and offensive.

Art is governed by laws which are the natural evolution of accumulated experience, and hence, to be effective, demands a certain conservativeness in its treatment. The greatest painters have not astonished the world by novelties in the arrangement of color, and light, and shade, which have no existence in the natural world, but by the unexpectedness of combinations, original, but not contrary to the truth.

Photography, like painting, has a tendency to get away from nature, and the photographer, like the painter, tries to persuade himself that he can alter nature to advantage by studio tricks; by a theatrical and sickly sentimentalism; by bizarre posing and false lighting. These shams with the gloss of novelty upon them, pass current for the gold of art. Fashion may even sanction their usage, and a false taste demand pictures made by such facile artifices, until the public, by constant familiarity with what is false, becomes so perverted that it cannot appreciate the true and the beautiful, even when some one more venturesome than the rest has the courage to present it to them, but regards it as something strange and unnatural.

Good taste in reality is nothing but good judgment; and the man of taste is only the man who exercises his judgment in the selection of what is to constitute his picture. Just moderation must be observed; the more material we crowd into the picture the more difficult it is to work it up to advantage; and anything unnecessary in a picture is just that which first of all attracts the eye of the observer, to the exclusion of that which is necessary to the harmony of the picture. Perhaps the greatest sin the photographer commits against good taste and judgment is in the use of ornament.

Ornament, if properly managed, may be made very effective. Its object is to please, and it can only please the artistic sense; that is the good judgment when it is in strict harmony with the subject. Hence, the kind of ornament to be employed in any particular case depends upon the character of the work. It must never be introduced for mere effect, to attract the attention.

It may be laid down as a general rule that ornament should, when introduced, be made to play a useful part in the picture; that is, it should be essential to the design. If it does not contribute something to the picture, it is worse than useless. It has a tendency to degenerate into the sensational, and mars the whole effect. This desire for excess of ornament and delight in sensational work, it must be confessed, is one of the failings of the day.

We are in the habit of buying our ornament by the foot or yard, and adapting it to any purpose, whether suitable or not; it does not matter, so we have a superabundance of it. This desire for tawdry to hide bad work is distressing enough to men of good taste, but what is still more distressing, is that the public is proud of what it calls an æsthetic feeling.

Dickens, in describing a rich man's dinner party, says:

"Hideous solidity was the characteristic of the plate; everything was made to look as heavy as it could, and to take up as much room as possible. Everything said boastfully—Here you have as much of me in my ugliness as if I were only lead; but I am so many ounces of precious metal, worth so much an ounce, wouldn't you like to melt me down? A corpulent, straddling epergne, blotched all over as if it had broken out in an eruption rather than been ornamented, delivered this address from an unsightly

silver platform in the centre of the table. Four silver wine coolers, each furnished with four staring heads, each obtrusively carrying a big silver ring in each of its ears, conveyed the sentiment up and down the table and handed it on to the pot-bellied salt-sellers. All the big silver spoons and forks widened the mouths of the company expressly for the purpose of thrusting the sentiment down their throats with every morsel they ate."

Now what is the artistic photographer to do? Cater to the false taste, or aim to teach the public to discriminate between bad and good? Alas he is too often compelled to bow to the opinion of the public and model his work accordingly.

Theatrical posing and lighting have done much to warp the taste. The excellent technical quality of the work done in this direction has led many to desire similar productions. Heads instinct with life and animation are accordingly mounted upon pedestals, simulating busts of Diana or Venus, or some other goddess of the pantheon; possessed of none of those features demanded by sculpture, but rather giving to the beholder of good sense and judgment, which are synonymous with good taste, the impression of those bodyless females with which the mountebank and magician delight the gaping spectators of country fairs and cheap shows. Whole statues are not infrequently represented which are every bit as ridiculous and sensational. But worse than this, we have seen plump damsels of considerable avoirdupois, seated in fairy chariots drawn by a team of little atomies or a string of butterflies. Even where the photographs are not rendered absurd by incongruities and impossibilities, they are frequently marred by some bizarre manner of posing and lighting impossible in nature, vet striking and eccentric; in a word, sen-

The photographer of good sense knows how ridiculous such work is, but a false taste demands it, and by doing battle to the public opinion he may do injury to his own pocket. Therefore he naturally yields up his better judgment, instead of trying to guide the public to an appreciation of what is true and beautiful. Let the conscien-

tious photographer remember the words of Ruskin:

"You cannot serve two masters. You must serve the one or the other. If your work is first with you and your fee second, work is your master, and the Lord of work which is God. But if your fee is first with you, and your work second, fee is your master, and the Lord of fee, which is the Devil; and not only the devil, but the lowest of these—the least erected fiend that fell."

AMATEUR PHOTOGRAPHY AMONG THE ALPS.

By Prof. C. F. Himes, Of Dickinson College.

THE improvements in dry plates in the past few years have advanced photography to the limit toward which it was working, but which it seemed only able to approach but never to reach. Many things previously regarded as beyond reasonable expectation, have not only thus been rendered possible, but indulgence in photography, as an amateur art, has been permitted to many before altogether excluded from its practice by its demand for time and suitable apartments, and the inconvenience in working, where so much was to be done by the amateur, as well as by the greater expense involved. As an amateur art it has, perhaps, no superior, either in direct returns-in the great variety of its possible results, or in the manifold character of its incidental results; in the recreation afforded, in mental discipline, in cultivation of the observing faculties, and so forth. For a number of years the writer has found it one of the most valuable courses of scientific practice, in connection with others, for students in college classes, involving, as it does, nice chemical and physical adjustments of conditions, and problems, and numberless queries that readily suggest themselves, and open up to investigation unexplored regions lying all are and As an educational means, although the wet process has features that will always recommend it, the dry-plate process has ample educational possibilities, and must be the proces for amateur, as it is rapidly becoming that of general professional, practice. Athough there is nothing to prevent a person of average intelligence and manual dexterity from producing photographic results of a most satisfactory character, yet the attractive, almost enthusiastic, advertisements now filling the columns of the leading newspapers and magazines, as well as of those devoted to photography, may in many cases lead to disappointment. Without any expressed misstatement, much less intention to deceive, they seem to say even more than, "It looks easy, try it." It might be inferred that all that is necessary is to get a mechanical arrangement, and some chemically prepared things to feed it, and grind out pictures as a hand-organ does music. But it would soon be found by any one rushing into amateur photography in this unthinking way, that a modicum of brains must be mixed up with the operations. Good pictures may be taken in a mechanical way, to be sure, but only as accidents, and in most cases very rare ones: whilst absolutely first-class ones would be much rarer still.

The art, as an amateur pursuit, would be wanting in many features that now recommend it were it otherwise. The variety of conditions that enter into the production of a first-class picture require some time and practice-and by practice is meant thoughtful practice-to be properly comprehended and appreciated; and also require, and aid largely in the development of, patience, painstaking care, pluck, and other qualities equally essential to success in any pursuit. A tyro, according to the writer's experience, even when above the ordinary intelligence, may make blunders of the most ludicrous and unanticipated character: but after a short time a sort of photographic instinct is developed, by which all minor conditions are taken in at a glance. It is care of the proper kind and at the proper point that is required. Thus, an amateur may be very careful of the polish of his camera, but if mathematical stillness of his instrument is unappreciated or uncared for, only continual disappointment will result. So with the choice of the subject, character of illumination, time of exposure, etc. In addition to this development by photography, and accompanying it, the amateur will find him

self drawn into new and pleasant associations; and the various magazines devoted to photography, seemingly dry and uninteresting to the general reader, will take on a new cast, and the numbers of one added to his stock will be anticipated with no less pleasure than those of other periodicals of more purely literary character; and perhaps with a peculiar interest, when common failures and experiences create kindred interests. He may even reach the high plane where failures may not be looked upon as unmixed evils. A failure or defect explained, especially with the conditions worked out for its avoidance, is the highest kind of a success. It is such success, built upon the broad basis of knowledge of necessary conditions, thus obtained, that diminishes more and more the residuum of accidental causes.

The preceding was written with a retrospect of more than twenty-five years of amateur photography, and there is no hesitation in saying that any one entering upon amateur photography in the spirit suggested will not voluntarily abandon it. It may, from force of circumstances, be intermitted for a time, but always with the expectation of resuming it, and never without an interest in all that pertains to the progress of the art in its processes and its applications.

At the time alluded to, amateur photography meant much more, in some important particulars, than it does now. Many chemical requisites now manufactured on a large scale, nearly uniform and perfect in quality, and cheap, were then painfully prepared by the amateur at much greater expenditure of time and money, in small quantities, of most variable quality, often from tentative for-Photographic apparatus now furmulæ. nished at command, adapted to any kind of work, at almost nominal price in ordinary cases, was not only more costly then, and inconvenient, but its possibilities very limited. Very perplexing compromises between different equally desirable features of a subject were rendered necessary by instrumental deficiencies. Amateurs were limited in number, and photographic associations scarcely had an existence. The first Amateur Photographic Exchange Club, comprising Mr. Rutherford, Professor Rood, Messrs. Thompson, Hull, Anthony, of New York, and Coleman Sellers, James Hunter, and Messrs. Corlies, Fassitt, Guillion, Rogers, of Philadelphia, and Shriver, of Cumberland, Md., and others, by a system of exchanges and correspondence, aided each other; a plan that commends itself as well to amateurs now. Photographic journalsat the time ably edited, and as good as could be expected in the state of the art, and of great value in its development, look feeble and almost puerile now, The establishment of the PHILADELPHIA PHOTOG-RAPHER, upon an advanced basis, as a representative American magazine, twenty years ago, was regarded as an enterprise promising little of permanent success; but the volumes of those years, issued without intermission in spite of frequently depressing conditions of the country, recording the steps of the advancing science, cause the gentleman whose pluck, untiring energy, and zeal have carried it through, to come in for a share of grateful consideration.

The following account of some experiences of the writer with the camera among the snow-fields of Switzerland, during the past summer, it is believed, may prevent others from hesitating, under similar circumstances, to include a photographic outfit among the other encumbrances of a journey.

CARLISLE, PA. (To be continued.)

OUR AMATEUR CLASS.

BY AN OLD AMATEUR.

THE present article is the first of a series, in which it is the intention of the writer to offer his experience in the delightful art of photography, with the conviction that it will be of service to the beginner, by clearing away those obstructions which beset him, and by guiding him in a pursuit which combines pleasure with the improvement of the mind. Our aim shall be a clearness in our mode of expression, and a trustworthiness in the instructions we shall convey. We would rather run the risk of being accused of tediousness, for the sake of clearness, than by conciseness mislead those who are anxious to learn and not to criticise style.

Our first essay shall be upon that branch of photography which has, perhaps, the greatest charm for the amateur, namely, landscape photography.

There has been much unnecessary discussion on the relation between art and photography. But whatever conclusion the disputants reach, one thing remains certain -to produce a beautiful picture, one full of effect and feeling, demands a high degree of artistic taste on the part of the operator. To direct the camera to any object or scene in nature, and expect from accuracy of focussing, or even from proper timing and after-development, a picture to be pleasing, or even satisfactory, is simply absurd. Good taste is synonymous with good judgment, and it is in reality the judgment which exercises the power of selection from nature of that which is beautiful and chaste. The operator should have constantly in view the effect to be produced, not by any one portion of the picture he sees upon the ground-glass of his camera, but from the general effect of the whole. He should strive to have the different parts of the picture harmonize, and not let any object be too obtrusive, either from its unsightliness or from its prominence, even though it be in itself pleasing. Such objects, by their obtrusiveness directing the eye first of all to them, injure the effect of the whole picture.

The operator should remember that a foreground is as necessary to the picture as a middle-ground or distance; but he should likewise remember not to overload it with too many objects, nor yet to make it so bare as to destroy the balance of the picture. It may sometimes happen that a scene in every respect beautiful, is marred by some unsightly object in the foreground; if it is possible by changing slightly the point of view to escape the annoyance, do so; but if this cannot be done, seek either to remove the object directly or hide it by some device; as, for instance, cover it with branches and leaves or seat figures upon it if possible. Indeed it is often necessary to place figures in the foreground, but here the exercise of the judgment is especially demanded and their treatment more difficult than inanimate objects, which may be disposed of at will. It is generally best to have the figures

in attitudes representing some action or work; it gives animation to the scene. Sometimes, however, repose will heighten the beauty of the view. Above all, remember never to let the figures stare at the camera. Let them always have the appearance of forming an essential part of the scene represented. Try to get the picture as sharp as possible.

In focusing, if you find it impossible to get both the distance and the foreground sharp even by use of the swing-back, then divide the focus, giving the preference always to the foreground and its immediate vicinity. A want of definition on the foreground is always more noticeable than in the distance. Let it be remembered that this is the case with our own vision, and a photographic picture can never err artistically if it translate the scene as it appears to our eyes.

Attention to detail is absolutely necessary; nothing effective can be done carelessly. It is better to take a single picture, and to make several exposures upon it, than to flash off a great number of worthless, unartistic, under-timed, and flat negatives, not worth the pains of development. It is a great satisfaction on development, to watch a well-timed and nicely arranged picture emerge step by step from beneath the developer.

Carelessness or over-excitement in the exposure of the plates is the principal cause why many beginners forsake photography in discouragement at their failures, when, with the exercise of a little care and patience at first, they might avoid them and soon reach that stage when the art becomes a healthful pursuit and a delightful recreation.

The main points demanded by a good photographic landscape are perfection of definition, brilliancy, and softness combined with vigor. There are certain conditions upon which success in these particulars is alone obtainable:

First. Proper Illumination. — Always choose a clear, quiet day for outdoor work. Avoid making an exposure when the foliage is moved even by a gentle breeze. A movement is always more perceptible with a short exposure than when more time is given to the negative. A bright, sunny

day is best for large views, because in them more contrast in light and shade is demanded. Hence, in such views never expose with the sun in front or behind the camera: let it light up the foliage from one side or the other, so that the shadows thus produced may break it up and nicely gradate it. A flat picture is always unsatisfactory because it is unartistic. In stereoscopic views a modification of the above principles is required. They require great softness and perfection of detail with brilliancy, and above all great sharpness and clearness; the contrasts need not be as decided as in single views. These points are necessary because the stereoscope enlarges the pictures, and any want of detail or great contrast would be more noticeable.

Second. Direction of Light.-The light falling upon the view should be so distributed as not to give an undue portion of light or shade. The subject should not be equally lighted all over, nor should it be all in shadow. There are, however, some exceptions to this rule, certain objects are taken best in a soft, subdued light when the sun is not shining brightly, or at all, as deep ravines or gorges with overhanging cliffs, or broad, flat surfaces of water with the sun in front. The reflection upon such surfaces would in the picture, cause only a dead-white impression, without any of the characteristic features of water, resembling mere banks of snow.

Clouds are not easy things to paint, neither are they easy things to photograph. Yet I think the photographer has so far exceeded even the best painters in the production of cloud scenery. Look, for instance, at a well-developed cumulus. Where have you seen it accurately represented by the Who ever really painted those delicate, long, filmy clouds known as mares' tails, with gentle curves floating upon the bosom of the air. At least, no artist has ever given them with the accuracy and delicacy of gradations of the photographs of some of our masters in landscape photography. The sky with clouds is a material part of the composition of a landscape. It is the key-note interpreting the whole scene. The photographer should never rest satisfied with smutty dull skies, trusting to his

steady hand to block them out of the negative with opaque. Such devices are bad, and the picture is generally spoiled to any one of artistic feeling.

There are better plans by which clouds may be secured in the landscape. Yes, even the "lazy pacing clouds" are too quick for the rest of the landscape. If the plate be exposed with the hope of securing the sky and the landscape at the same time, certain devices must be made use of. The sky requires only about one-third the time of the foliage; and if the proper time is given to the latter, the former will be over-done and too dense, and without gradations of half tones.

It is for this reason that most operators employ the flap in front hinged from the top of the lens, which, by shading the sky, prevents it from being over-timed. Care must be taken to keep the flap in gentle motion, otherwise a rigid, distinct line will be formed on the plate. It is also necessary to gauge the distance through which it moves by the extent of sky surface required in the picture.

GLEANINGS.

THE Moniteur de la Phot. recommends a modification of the method of reduction of too strong negatives by chloride of copper, which was translated from the Photographen Zeitung in the December number of last year of this magazine.

The strong negative is laid in the solution of chloride of copper until it is quite white. After the washing, it is redeveloped with the strong oxalate of iron developer (one to three). If the developer is weak it will make the negative only more intense.

If the lights in the negative are too strong, and the half-tones only moderate, the plate is allowed to remain in the solution until the entire film appears white on the back side. It is then slowly developed with the oxalate developer, and carefully examined from the back of the plate. It will be found that the shadows are reduced first, and appear black on the reverse side, then the half-tones, and finally only the high-lights appear white.

The proper time to stop the operation will be found by practice. The plate is then thoroughly washed, and dipped in hyposulphite of soda solution until the white portions are entirely transparent. By this means only the high-lights are reduced and a soft and pleasing negative is produced from a harsh and unartistic one.

FOR REDUCTION OF TOO STRONG NEGATIVES.

After fixing and drying the plate which it is intended to reduce, it is laid in the following mixture:

One part of a saturated solution of bichloride of mercury, one part of a saturated solution of cyanide of potassium, and six parts of water.

The action is to be carefully watched and the plate to be immediately washed as soon as the desired effect is obtained.—Photographische Mittheilungen.

Intensifying Weak Gelatine Negatives.

The intensifying of weak gelatine negatives may, like collodion negatives, be effected after the fixing, and in like manner, with pyrogallic acid or sulphate of iron and silver, or with mercury or ammonia.

Before intensifying, it is necessary thoroughly to wash the hypo from the film, which is accomplished best by letting the plates lie in an alum solution for fifteen minutes; after the alum bath the plates must again be washed.

The silver intensifier is made as follows: 500 cubic centimetres of water, 6 grammes of sulphate of iron, and 12 grammes of citric acid. Before using, the required quantity of silver is added in the shape of nitrate.

A very beautiful intensifier, and one which is slow in action, and hence perfectly under control, is the gallic acid intensifier.

No. 1. 100 cubic centimetres of water, and 1 gramme of gallic acid.

No. 2. 50 coble continuetres of water, 2 color continuers of nitrate of silver, and 2 cubic centimetres of acetic acid.

of No. 2, and the mixture flowed over the plate while till wet. The strengthening program is beautifully and regularly.

The quicksilver intensifier is applied in the following manner:

200 cubic centimetres of water, 5 grammes of chloride of ammonium, and 10 grammes of chloride of mercury. This solution keeps well.

Be careful not to use more chloride of ammonium than the above amount, or the film will peel off.

The solution is poured upon the plate, and the plate moved about till the image is gray; if any hypo is in the film it will be manifest by the milky appearance. The negative is next well washed and poured over with a mixture of one part of ammonia with ten parts of water, or lime water without the ammonia. Finally, it is again thoroughly washed.

TONING WITH DOUBLE CHLORIDE OF GOLD AND CALCIUM.

Mr. Encause, a name well-known to all our readers, has just introduced a new double salt, composed of chloride of gold and chloride of calcium, by means of which he not only greatly simplifies the operation of toning, but also makes it less expensive, whilst the results are always identical for prints that have received the same exposure.

We have tried this double chloride of gold and calcium in a solution containing one gramme (fifteen grains) to a quart of ordinary water. The print is immersed, without previous washing, in this liquid, in which it immediately frees itself in the form of insoluble chloride of silver from the free nitrate of silver which always remains in a greater or less degree on the surface of all kinds of sensitized paper. The toning proceeds gradually as far as the black, but it is easy to stop the effect at the desired moment, so as to obtain, in an artistic point of view, the desired tone. The bath may be preserved indefinitely, and as light exercises no influence on it, it can be used until exhausted.

Mr. Carjeat, who has made a careful trial with an entire ream of photographic paper, used for the purpose a solution of five grammes (seventy-seven and a half grains) of chloride of gold and of calcium in five litres (one hundred and seventy fluidounces) of ordinary water. This trial lasted a fortnight, and every day the preceding bath was used, adding a tumbler of the fresh bath.

The tones obtained are identical with those given in the bath composed of acetate of soda and chloride of gold.

Here is the *modus operandi* recommended by our skilful colleague:

Shake the bottle which contains the solution, and pay no attention to the precipitate, which gives it a turbid appearance.

Do not wash the prints that are to be toned. Pour into the dish a sufficient quantity of a solution of the strength of one gramme (fifteen grains) per litre (thirty-four fluid-ounces). Do not tone more than thirty prints at one time, owing to the rapid action of this bath.

As soon as the prints obtain a bluish tint, take them out and plunge them in water, to avoid the slaty tint. When toned, the prints are plunged into the hyposulphite solution. In operating in this manner, a desirable warm tone is obtained, and the whites are remarkably pure. When the operation is finished, the bath is put aside, and before being used again it is quickened by adding about one hundred grammes (three ounces, one drachm, forty-three grains) of fresh solution. To obtain a good tone it is essential to make the solution at least forty-eight hours before use.

To resume, with the new toning bath of Messrs. Encause and Canesie, which is about one-half the price of the ordinary gold bath, we arrive at the following results:

Saving in the price of purchase.

Saving by doing away with the secondary products, such as acetate of soda, carbonate of soda, borax, etc.

Saving of time.

Saving on the residuum, since all the chloride of silver precipitated in the toning bath is found on the filters.

Identical results.

Possibility of using this bath with all kinds of sensitized paper.—LEON VIDAL, in *Paris Moniteur*.

SPILLER writes (Bull. de l'Assoc. Belge): "I lately saw a defect in some gelatine plates which previously I had not noticed. They had been intensified with the mercury intensifier and ammonia, and exhibited a brown discoloration at the edges and corners, where the liquor was flowed off the The negatives were valuable, and not to be replaced, and I was entreated to make some effort to rescue them from ruin. I was doubtful of success, and hardly knew what to do with them, but I thought, since the negatives are worthless in their present condition, I risk little in experimenting, even if I should totally spoil the whole. Accordingly, I laid one of the plates in water, and gently rubbed with the finger the brown discoloration from the Encouraged by this, I made the same trial with the other plates, only substituting a cambric handkerchief for my finger, and succeeded admirably."

Editor's Table.

A GREAT CURIOSITY.—A few weeks ago, Mr. J. F. RYDER presented us with a little piece of wood, about sixth size, upon which was curiously printed the picture of a lady. The wood had backed an ambrotype for a number of years, and during those years the image had been printed upon it by the action of the light through the ambrotype. A curious occurrence is also visible here; a little label of paper seems to have been placed between the ambrotype and the wood, and here, of course, the image is much more faint than the rest, and the shape of the paper plainly appears. Moreover, the oval size of the picture is distinctly shown,

many shades darker than the original wood, though not so dark as the blacks upon the paper itself. The whole thing is a photograph on wood against its will, evidently, but a curiosity. It may be seen at our office. We do not know how many years were required to complete this process, but no doubt it is too slow for general adoption.

A COMPLAINT.—A complaint has been made to us that in the report made of the exhibits at Milwaukee for the *Philadelphia Photographer* and for the *Photographic Times*, some omissions were made. We hardly think we are re-

sponsible for that, when we state that because of the reprehensible custom of receiving exhibits up to the last minute, it became necessary for us to postpone taking our official list until the last day. Then we were opposed by another reprehensible custom, namely, that of removing exhibits before the close of the exhition. Both of these caused the omissions complained of. We unintentionally omitted the names of some of the exhibitors, we suppose, for the reasons mentioned above. Certainly no one could accuse us of purposely making such omissions.

Mr. D. R. CLARK, of Indianapolis, sends us a clipping from a city paper praising his excellent work, and detailing his splendid collection of examples of photographic progress which were exhibited at the Milwaukee Convention. By some reason or other we overlooked this fine collection, and regret not having mentioned it in our make up of the list of exhibits.

Why? A good many photographers believe that we should criticise the exhibits at the national exhibitions more than we do, that those who see them might learn from them. What an immense job this would be should any unwise editor undertake it. Not only would he be required to devote volumes to the work, but he would be compelled to move his sanctum a dozen or more stories higher, barricade the door, place Gatling guns and revolvers in position, and would tremble like an aspen for months after the work had been completed. Nothinking, experienced photographer, certainly, will ask why the pictures at our conventions can not be criticised by the editors of our magazines.

A FINE ARTIST .- The admirable paper in our last number on "Chiaro-Oscuro," by Mr. G. H. CROUGHTON, as well as the one we print in our present issue, will convince any doubtful reader that he is a true artist, and such he is indeed. Mr. CROUGHTON, for a good many years, has stood highest among English photographers as a painter of photographs. His talent is most versatile, for he is able to do any kind of photographic coloring, from the tiniest photo-miniature to the most extensive oil painting. His crayon and water and Indian-ink work are also first-class. He carried off the only medal given for an hed enlargements at the International Exhibition, South Kensington, London, 1874, again I competitor from all parts of the world, and hit exhibits at the Royal Cornwall Polytestant Society's Exhibition were so good that, although no medal was offered for painting, the

judges nevertheless awarded them a special first-class medal. He has come to this country to settle among us, and is ready to work for the trade. Of course, the quality of his work being first-class, he does not solicit that which is known in some places as "cheap and nasty," but aims only at the best productions. We feel warranted in saying that if our best artists employ Mr. CROUGHTON'S talent they will not regret it. We commend him to the interest of the fraternity at large. His address, at present, is 912 Chestnut Street, care of the Philadelphia Photographer.

A GOOD WORD FROM GERMANY FOR AMERICAN DRY PLATES .- DR. VOGEL, in his letter to the Photographische Mittheilungen, says: "When I started out for America I determined to take my camera along with me, and accordingly provided myself with a quantity of dry plates. I was fully aware that there were American-made dry plates, but I was doubtful as to their quality and price. Since I have been there I can speak from experience. I can only speak of them in the most favorable terms. America produces excellent dry plates, and the price is no dearer than in Europe. There are the plate factories of Messrs. EASTMAN, in Rochester, John CARBUTT, in Philadelphia, CRAMER and NORDEN, both in St. Louis, BEEBE, in Chicago, and PASSAVANT and TABER, both in San Francisco. I have had opportunities of trying these various plates; those I have examined have proved most excellent in every respect."

We have received from Mr. H. A. HYATT, the stockdealer of St. Louis, a number of artotypes representing studio accessories of most beautiful designs and artistic conceptions, novel and chaste, and entirely different from the stereotyped furniture we are accustomed to see in interior decorations. They are the production of the Western Interior Decorating Company, of which Mr. Hyatt is agent.

The Air-Brush.—The dusting-on process which is gaining such favor in this country, seems to be a great novelty amongst English and Continental photographers. The Photographic News remarks: "Dr. Vogel says that in his recent American tour he noticed that many studios made use of a sort of spray distributor for retouching large portraits. Not eau de Cologne, but very fine pigment powder was expelled from the apparatus. The instrument is held in the hand like a stylo or pencil, and is connected by a rubber tube with bellows—the air-brush (which

is advertised in the Philadelphia Photographer); then, by placing the foot upon the bellows, a stream of dust particles is made to issue forth, which adhere to the paper picture. The particles attach themselves very readily to the surface, so that if the mouth of the instrument is close to the picture a dark spot ensues, while the further off it is held the lighter and softer is the shading produced." Dr. Vogel himself, although no draughtsman or retoucher, took the little instrument in hand, and was surprised at the results he produced, which were far more delicate than could have been obtained with crayons applied by hand. Mr. ZIMMERMAN, of St. Paul, who was one of the first to introduce this system of retouching pictures in his studio, avows that a crayon portrait can now be finished in half the time formerly required.

AN ALLEGED FRAUDULENT BUSINESS .- Messrs. EDWARD J. VENABLES and ROBERT HENRY GRAHAM, Managers of the RELIABLE MANUFACT-URING COMPANY, were yesterday placed on trial in the United States District Court, charged with fraudulent use of the mails. Their scheme, as investigated by Special Postal Agent BARRETT, was to promise large returns, particularly to young ladies, for a new operation of coloring photographs, called "electrographing." charged one or two dollars for imparting the secret of the art. Through large advertising they came to be in daily receipt of from three hundred to seven hundred letters, which fact excited suspicion. Several young ladies testified vesterday that they could not get paying work, according to promise, after learning the art. The case is still on.

The Philadelphia Photographer, whose argus eyes are ever on the watch to detect the approach of fraud to the profession, warned its readers more than a year ago of this fraudulent design to trap the unwary.

IN A NEW PLACE.—Mr. A. C. ISAACS, the well-known photographer, has recently moved into new and elegant quarters over the store of S. KLAUBER, Esq., on Main Street. His rooms, in the new location are fitted up in the most approved manner, with all the modern fixtures in complete order. Madison has long been noted for the great excellence of photographs made there, and Mr. ISAACS has done much to establish so good a reputation in this respect. He has shown wonderful skill and enterprise as an artist, and his works clearly prove that he has made a grand success in his line of business. We recently looked through his new rooms, and

nothing seemed to be wanting to make them complete. He has excellent light, and all the apparatus needed to produce the best of work; he is patient and painstaking with his patrons, and determined that nothing but first-class work shall pass out of his establishment. His showcase at the entrance to his rooms, contains as fine specimens of the art as can be found in the country. The pictures are fine and life-like, exhibiting the best positions of the persons, as well as great skill in the execution of his work. No person need go out of Madison for photographs in order to obtain the very best, and they will be quite sure to secure them if they call on Mr. Isaacs.—Wisconsin State Journal.

THE CINCINNATI CONVENTION.—We recently had a personal interview with Secretary Weingarther at Cincinnati, and completed our arrangements for securing the earliest and best report possible of the coming convention. The Committee will meet Mr. Weingarther soon and decide upon the building to be used, and that will rule the dates of the Convention. We shall keep our readers thoroughly posted on all that will serve them in this matter.

As a curious freak in photographic publication, we note the retranslation of Obernetter's Process, which Mr. Scholten presented to the Association, and which we translated from the German for the benefit of our non-German brethren, and published in full in the October number of the Philadelphia Photographer last year, Herr Liesgans in his journal, Photographische Archiv, has reproduced the entire English translation, literally, in the German, and made known the source whence he obtained it. This is verily carrying photographic coals to Newcastle.

MR. H. F. NEIDHART, proprietor of the GARDEN CITY DRY-PLATE COMPANY, of Chicago, has opened his new factory at 361 Milwaukee Avenue, where he is prepared to supply the profession with his special brand of plates by his new process, known as Neidhardt's Special. These plates are uniformly rapid and clean, and are used by such Chicago photographers as Messrs. Max Platz, Joshua Smith, Melander Bros., Alexander Hesler, and others, who pronounce them entirely satisfactory. Mr. Neidhardt is anxious that his plates should be widely known, and requests that you order at least a sample, that you may be convinced of their excellence.

WE have received the sixth part of Dr. Josef Maria Eder's Handbook of Photography, which

treats of the negative process, and of the Daguerrotype, Talbotype, and Niepcotype. The work is not merely historical. There is a happy blending of theory and practice, rich in suggestions, and bearing witness to the untiring labor and pains the author has taken to collate the important facts which have accumulated from the infancy of the science, and not to collect only, but thoroughly to digest and present in a shape at once comprehensive, concise, and clear, even to minute detail. In its exhaustive treatment the work is essentially German, and must, of necessity, be of great value to the photographer.

WE take pleasure in announcing to our readers that the well-known house of Messrs. Benjamin French & Co., of Boston, which has served the interest of the photographic fraternity for so many years, and whose aim has always been to supply the latest and best products to the profession, are now importing the choicest quality of the Trapp & Munch Albumen Paper, which they offer at the most reasonable prices.

ART IN SEATTLE .- Fine art is confined to no clime and no location, and can, under proper auspices, flourish as well in Seattle as in the Louvre of Paris. The truth of this was demonstrated to a Star reporter when he paid a visit to Moore's studio several days ago. The scribe was agreeably surprised by the excellent and meritorious work turned out by the great photographer, and has no hesitation in saving that Moore's pictures will compare favorably with any ever produced in Portland or San Francisco. A stroll through the gallery gave ample opportunity to inspect Prof. Moore's work, and among other things the handsomely finished photographs of Col. Squires and SAM Brownstone were elaborate in the extreme. A new design known as plaque photographs has recently become very popular, and several excellent specimens are on exhibition in the studio. The new method known as the "dryplate process" has been introduced here by Mr. MOORE, and the results, particularly with children's pictures, have been very satisfactory. Among many other attractions, the great artist has recently received two elaborate background corner from the famous painter Shaver, of New York, whereby a new and additional charm is lent to all the photographs turned out from this Ballery . Scottie Sanday Star.

We have also received from Messes. Dot Glass, Thompson & Co, of Chicago, their circular con-

taining an illustration representing their studio. It is fitted up in the most complete manner, to meet the wants of their patrons in buying lenses, cameras, dry plates, backgrounds, and all the various accessories used under the sky-They also invite the attention of the public to their Bureau of Retouching, established two years ago, which has given satisfaction to all who have sent their negatives to be retouched. They employ a corps of skilful artists, and make it a point to do all work promptly, and in a perfect manner. We have also received from Mr. ALVA PEARSALL, of Brooklyn, N. Y., a beautiful pamphlet entitled What is the Alvagraph? The alvagraph, whose merits are dwelt upon in this book, is a full life-size bust portrait, made directly from life, at one sitting before the camera, in a few seconds, embodying all the fineness of quality for which his imperial or cabinet photographs are noted. The great value of these new life-like heads consists, first, in their never-failing likeness; second, the facility with which any number of exact portraits can be made from one plate; third, their stability, being practically non-fading; and, fourth, being much less expensive than crayon portraits. The opinion of all who have seen them, is that they are the most beautiful productions of the camera.

WE have received vol. vii. of the Journal and Transactions of the Photographic Society of Great Britain, full of very interesting matter. We quote the following naive reply of the President, JAMES GLAISHER, F. R. S.: "There is only one thing I would like to say. As a juror of the Exhibition of 1851, I was requested by the Society of Arts to give a lecture upon photography in that Exhibition. On that occasion I criticised the various pictures, and showed where many were wanting in pictorial effect, and gave great offence to the photographers who were present. However, at the termination of the lecture Mr. CLAUDET came up to me, and calling me aside said, 'Well, you are brave, you have spoken your convictions.' While many on the other side exclaimed 'well done!' And it was so well done that the publication of the lecture was suppressed, and it never appeared. But it is now a great pleasure to me to think that I spoke as I then did." (Applause.) Now, do you think the advice was good our friend gave us (quoted elsewhere), to criticise the exhibits at the Convention that others might learn to correct their faults. We are sure we would have given "great offence to the photographers who were present."

Specialties.

ADVERTISING RATES FOR SPECIALTIES.—It will be understood that matter under this head is not to be considered as always having editorial sanction, though we shall endeavor to clear it of anything tending to deceive or mislead. Stock-dealers will find this a beneficial mode of advertising, and sure to pay largely. Six lines, one insertion, \$2.00, and 25-cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement.

BULLETIN OF

L. W. Seavey, hys Studio, 8 Lafayette Place, N. Y.

Our new branch office is at 243 State Street, Chicago, Ill.

W. F. ASHE,

Of 106 Bleecker Street, New York, had the largest show of interior and exterior

BACKGROUNDS

AT THE

MILWAUKEE CONVENTION.

He sold them all and received many orders for more.

Make Your Own Enlargements.—The Patent Gem Solar Camera will print the finest enlargements on albumen, platinum, or plain paper. Only \$60. Send for reduced price-lists of larger instruments.

D. A. Woodward,

Baltimore, Md.

Notice of Removal.—Mrs. Clarke, Artist, late of 561 Druid Hill Avenue, Baltimore, begs to inform her friends and the photographic profession that she has removed to 2104 North 20th St., Philadelphia, Pa., where she will be happy to receive any commission for water-color painting. Terms, etc., on application to Mrs. Clarke, or to the office of the Philadelphia Photographer.

ROCKWOOD SOLAR PRINTING CO.

17 Union Square, New York.

TIME.—It is our intention that every order received in the morning's mail (when not to be put on stretchers) shall leave this establishment the same day or the following morning. If too late for the morning work, it is sent on the second day. Having our own engine and electric light, we are not at all dependent on the weather.

GEORGE H. ROCKWOOD, Business Manager.

ADDRESS CHARLES EHRMANN, Harlem, N. Y., Secretary of Association of Operative Photographers of New York City, for operators, printers, and retouchers, or in care WM. Kurtz,

233 Broadway, N. Y.

THE EMBOSSED FOREGROUND

Printing in negatives are from designs in relief work.

C. M. FRENCH, GARRETTSVILLE, O.

THE PLAQUE PHOTOGRAPH, PATENTED.—Photographers desiring a novelty to raise prices on, and something very attractive to the public, will please investigate the Plaque. See other advertisement. Address F. B. CLENCH,

Lockport, N. Y.



WILSON'S PHOTOGRAPHICS

Shows you how to group and pose children naturally and gives fine examples of work. Read the partial index herein. \$4.

1864

M. WERNER,

PORTRAIT ARTIST.

1884.

No. 102 N. TENTH STREET, PHILADELPHIA.

Photographs finished in crayon, India ink, water colors, and pastel, in all sizes, in the very best styles, and at moderate prices.

Solar Prints and Enlargements Furnished.

WILSON'S PHOTOGRAPHICS.

It is a most useful book, and its practical teachings to the studious photographer contain the most valuable information.—C. D. MOSHER, Chicago.

EVERY photographer in want of excellent lenses, for any purpose, will best serve his interest by consulting the new illustrated price-list of Messrs. Benjamin French & Co., before purchasing.

GLASS RECOATED

BY THE

PELLA DRY-PLATE COMPANY,

PELLA, IOWA.

We recoat glass from 5 x 7 up. Send for our prices, also our circular on our dry plates. Send one dollar and fifteen cents for a trial dozen of our 5 x 7 plate—wet-plate effect. We sell only to consumers.

WAYMOUTH'S

No. 18. VIGNETTE No. 18.

The old form of No. 18, Waymouth's Vignette Papers, oval, has been discarded, and a new pear-shaped style is now ready in its place. It is a beautiful piece of gradation and prints perfectly. Price \$1.25 per dozen. For sale by all dealers. See advertisement.

No. 18. NOW READY. No. 18.

EDWARD L. WILSON'S

Personally Taken Views of the Orient.

(See Advertisement.)

BINGHAMTON, N. Y., March 16, 1883.

FRIEND WILSON: The "views" came, and we like them even better than the others, but the more I see of them the more I want to possess.

Most respectfully,

WELL GEE SINGHL

AGENTS WANTED EVERYWHERE.

CATALOGUE FREE.

EDWARD L. WILSON, PHILADELPHIA.

Wanted.—A steady young man as printer and retoucher. Must come well recommended. A permanent situation to the right man.

Address W. H. VAN PATTEN, Great Barrington, Mass.

The Photographic Mosaics for 1884 is ready. Like its predecessors, it contains articles of interest to all persons connected with the art of photography. The introductory article by Edward L. Wilson is teeming with useful information, and should be read to be appreciated. As there is but a limited number of copies printed, those who wish to have a useful as well as ornamental work for their studios, should avail themselves by sending in their orders as quickly as possible.

THE PLAQUE.

Read Mr. Clench's Advertisement.



WILSON'S PHOTOGRAPHICS

DEVOTES 58 pages to instructions in posing and lighting the figure. See advertisements. \$4.

PORTRAITS IN CRAYON.

The new book by E. Long, on the art of making portraits in crayon on solar enlargements, covers the entire ground, and is sold for the low price of fifty cents. For sale by

EDWARD L. WILSON,
Philadelphia.

WILSON'S PHOTOGRAPHICS.

It is the best book I ever got possession of. Those who want lightning or instantaneous processes had better get a copy and work with pleasure. Nothing like it; too good to be without.—Joseph Theiring, Cincinnati, O.

PROGRESS IN PHOTOGRAPHY.
\$3.00—Read Vogel's New Book.—\$3.00

S. G. NIXON,

PORTRAIT ARTIST.

No. 813 Arch Street, Philadelphia, Pa.

CRAYON AND WATER COLOR PORTRAITS.

Solar prints and photographic enlargements furnished and finished in crayon, Indian ink, or water-colors. Photographic coloring on plain or albumenized paper and porcelain. Copies finished in Indian ink and water colors.

References and terms on application.

THE PLAQUE.

Read Mr. Clench's Advertisement.



WILSON'S PHOTOGRAPHICS.

It is a perfect encyclopædia of the photographic art up to date.—H. L. Bliss, Buffalo, N. Y.

SOMETHING NEW.

FRENCH'S

EMBOSSED FOREGROUND AND BORDER NEGATIVES.

C. M. FRENCH, GARRETTSVILLE, O.

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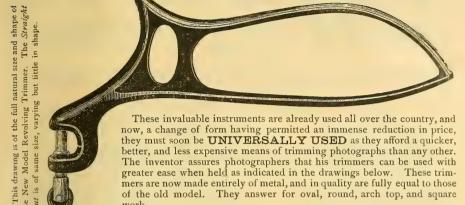
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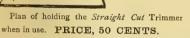
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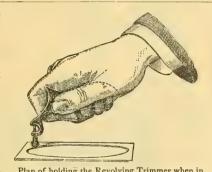
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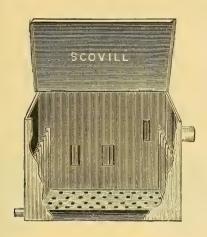
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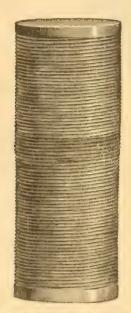
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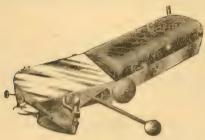


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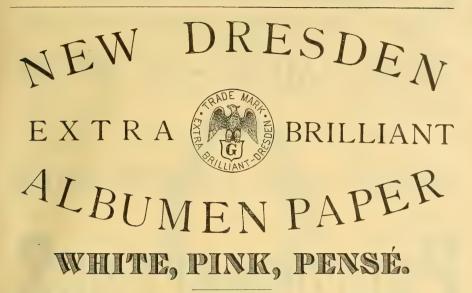
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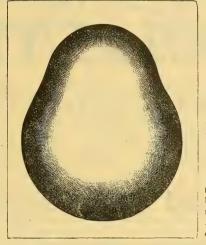
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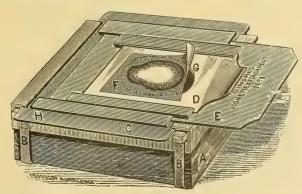
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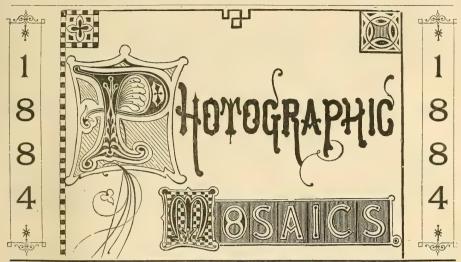


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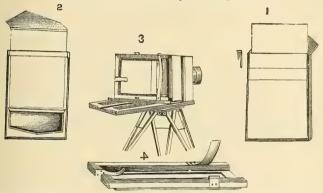
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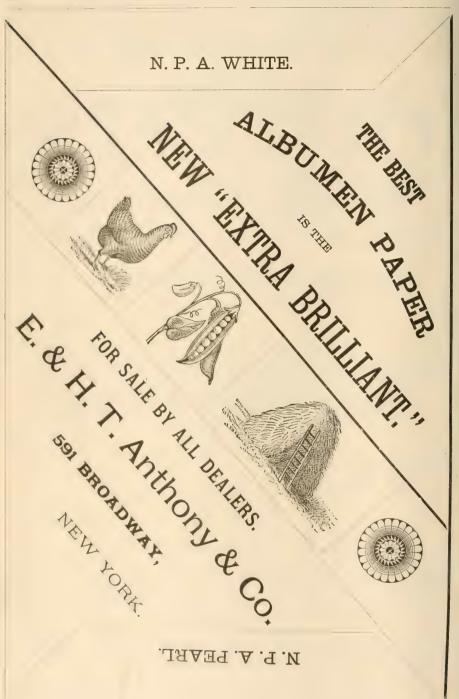
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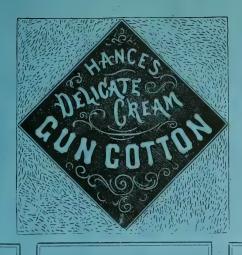
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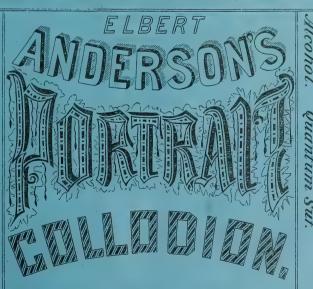
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EDITED BY EDWARD L. WILSON.

Vol. XXI.

FEBRUARY, 1884.

No. 242.

DOTS OF THE DAY.

Mr. C. H. Scofield, "the best camera" man says: Perhaps many photos do not know that they can number their negatives with a lead pencil on the gelatine film, and it is indellible.

A MERITED HONOR .- At a meeting of the Board of Trustees of Washington and Jefferson College, Pa., held December 19th, the honorary degree of Ph.D. was conferred upon Mr. Edward L. Wilson, of this city, and very rarely, indeed, is this degree more worthily bestowed, for besides his general scholarship, Mr. Wilson's studies in chemistry, optics and physics have been most thorough and exhaustive. Mr. Wilson has lately returned from the West, where he has been delivering his illustrated lectures with great success to crowded houses, and during February he will deliver four entirely new lectures before Philadelphia audiences in the Academy of Music. On January 24th, he lectures, by invitation, at Chickering Hall, New York, before the American Geographical Association, on his explorations in Petra Arabia, illustrated by his personally made views in the lantern .-Philadelphia Inquirer.

THE price question, discussed on another page, is one we have taken up in earnest, with the determination to keep banging at it until we do some good. There is no use

in resoluting on this thing. Photographers want to be braced up so they can demand fair renumeration from their patrons, and must be treated individually. Fortunately, the "home treatment" can be practised largely.

Mr. Kent's picture in our last issue has brought many words of praise. The negatives were, as we stated, a splendid lot, unspotted, and clear, and clean; but here and there our printers allowed dust to fall upon them, the marks of which rather caused our assertion to be doubted. The chief cause was soft varnish, into which the dust became imbedded.

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—This leads us to echo a sigh which we often hear for "a better varnish for dry plates.'

Won't our skilled varnish men look into this?

Mr. John F. Singhi, of Rockland, Me., inventor of Singhi's Vignetting Apparatus, was born November 10, 1833. The Rockland Opinion of a recent date has a long article respecting this successful artist, and closes as follows:

"Mr. Singhi has also introduced a number of ideas and devices in his business. One of them "Singhi's Vignetting Attachment" for use with Waymouth's vignette papers, has been patented, and is extensively used. It is manufactured in Phila-

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delphia, and has been a great success, and is conceded to be the best arrangement for adjusting the vignetting appliances in the world. Mr. Singhi is a courteous, genial gentleman socially, and progressive and public-spirited as a citizen."

HARD TO LEAVE IT.—It is amusing to see how parties who have left the practice of our art, continue to "hanker" after it. Here is a case:

The December number of the Photog-RAPHER came to hand with a little slip enclosed, reminding me that the time for which I had paid had expired. I am compelled to bid good-bye to the P. P. for a time at least. I sold out last June, and am net now working at the art photographic, and at present there is little prospect that I shall ever again engage in it; although, whenever I pick up a photographic work or go into a gallery, I feel a strong "hankering" to "dip into it" again. What little I know of the art has been acquired from your publications, as I never have been able to find a teacher in the country, and never could get money enough together to go anywhere else. So it is much like bidding an old friend adieu. If I ever engage in the photo business again you will know it, because the first thing I shall do will be to subscribe for the P. P.

> Yours truly, W. O. MATZGER.

DAYTON, W. T.

A SIGN OF THE TIMES.—Dot down the fact that photos are better artists than they used to be. Here is one evidence of it:

I want to thank you most heartily, and through you, Miss Charlotte Adams, for her article in December Philadelphia Photographer. I have read it and reread it with delight and profit. Though I have been a photographer over forty years, and a student all this time, I still love to learn, and here learned much from this article. It is said pleasure to take each picture, read her criticism upon it, and study it anow. Give us more

Yours truly,

E LONG.

Otto e. the

Last April I went to Gloucester, Mass. (near Boston), with the camera and twenty Eastman plates; twelve specials and eight instantaneous. The twelve specials went like wind, and there was plenty of subjects left, but all moving, full of life. So I whacked away at them, using the instantaneous shutter and one two-hundredth part of a second exposure. When I got home the specials developed good; I saved every one; but the instantaneous were undertimed, and I lost three trying to make something of them; the five remaining I put away for future trial. Last week I took them in hand and saved them all: this goes to show that development is improving, and shows the good keeping quality of the plates. I must say I was pleased, and I had reason to be, for such trials give us rich results in experience for future use.—Benjad.

OUR AMATEUR CLASS.

BY AN OLD AMATEUR.

In a former article, the endeavor was made to show what constituted picturesque effect in landscapes, and what were some of the requisites by which this quality might be secured in a photograph.

It was shown that one of the first things demanded was the possession of an artistic sense or feeling by the operator-either inbred or the result of education-and that without it the best manipulation would only produce that which was vulgar and commonplace. It was also shown that, while the painter uses his brushes and colors to call forth upon the canvas the forms and gradations of the scene before him, the photographer, pressing into his service the pencil of the sun, and guiding its action by his skill in proper timing and management of light-through lenses and various chemicals -might produce analogous results, and, although in monochrome, nevertheless well entitled to the name of art.

The artistic quality was shown to depend upon a barmony in all the parts of the picture; a relation being necessary between the foreground, the middle, and the distance, and a right balance adjusted between sky and ground; and in the sky, a proper disposition made of the clouds. The foliage,

and its proper rendering, are no less important in securing artistic effect. Nothing can be so unsightly in a picture as a dense mass of foliage, without any detail or half tones. It offends the artistic eye, and will ruin a view, no matter how beautifully rendered may be the sky or the rest of the picture. Indeed, there are certain devices by which badly taken skies may be remedied, but there is no cure for ill-defined and flat foliage. To secure good results with foliage, a perfect calmness of the atmosphere is demanded; the wind must be still. A scene such as Keats describes would make a beautiful photograph:

"No stir of air was there;
Not so much life as on a summer's day
Robs not one light seed from the feather'd grass,
But where the dead leaf fell there did it rest."

The slightest motion of foliage in the foreground produces a blurred and indistinct mass in the front of the picture, which detracts from, if it does not totally mar, the whole picture. Always wait for the calm which follows the gust of wind.

Patience is one of the virtues which the photographer should have in preëminence; and patience shall have her perfect work. Its reward shall be the beautiful negative which shall result from the favorable combination of circumstances. Always be ready to seize the favorable moment. Have everything in readiness to make the exposure, and cease the instant the wind gives his gentlest premonition that he intends again to rollick with the sportive leaves.

The presence of the sun is essential in securing good results with foliage; it should never be taken when entirely in shadow. A landscape—especially one of any extent—is always flat and low in tone when not illuminated by the sun. There must be relief and contrast, which can only be secured by aid of the sunlight-not necessarily in its full strength, but at least in sufficient quantity to give the relief, and to break up the lights and shades. Often when the sun is behind a light mass of clouds the best results are effected, and the time of exposure lessened. The photographer should not forget that shadow, as well as light, is demanded by an artistic view. Do not try to get all the light possible upon the scene by working with the sun behind the camera. Some subjects demand the admission of the light from the side. Here, good judgment, which we have elsewhere shown to be synonymous with taste, is demanded.

The proper rendering of still water in the photograph demands the greatest attention. Nothing is easier than to give it the appearance of a flat, level bed of chalk; but to get the real look of water, with beautiful reflections, showing it to be a mobile, transparent fluid, requires special management of the light. Too great a flood of light upon the surface often results in giving such density that all reflection is destroyed, especially if the sun is in front of you. A light, cloudy day will generally be found to give the best results.

When it is desired to photograph water in motion, as in a waterfall, or in the gentle rippling of the stream, recourse should always be had to the instantaneous drop and to rapid plates. Otherwise the rendering of motion will be destroyed, and only the appearance of wool result.

Third. Length of Exposure.—The estimation of the length of time a plate should be exposed seems to demand a sort of intuition on the part of the operator. He must be able to judge exactly; otherwise the negative will be either undertimed or overexposed. It demands, first of all, a thorough acquaintance with the apparatus, which can best be learned by trial. Some lenses are more rapid in working than others, and hence require less time to produce the same result. It is best, on general principles, for the beginner to confine himself to the use of a plate of known rapidity, and not to jump from one brand to another. Certain data will thus be obtained, which will be of service to him in judging of proper timing.

It is not always possible, or even desirable to use the same lens. Sometimes a long-focus lens is demanded, for very distant views; sometimes a short focus is needed, where the view is limited in extent. The length of focus may be doubled by taking out the back combination, if the lens is a double one. When this is done, longer time should, of course, be given to

the plate. On general principles, it is best to use a lens of moderate focal length—rather inclining to long focus than to short. A short-focus lens should be used with caution, because it is very apt to exaggerate the foreground, to distort any very near object, and also to dwarf the distance.

On the use of stops or diaphragms. It is best, also, to confine one's self in the beginning to the use of one or two stops, until we become thoroughly acquainted with what they are capable of doing. It is best to use at first the largest stop which will give good definition, except when very rapid plates are made use of, when a smaller stop should be used; otherwise the plate would be over-exposed.

Avoid under-exposure. An over-timed plate, by skilful development, may be corrected; but when the plate has been undertimed, all doctoring by development is unavailing to bring it up from its thin, sick, and pale condition. It is worse than useless, and that it may not be an eyesore to you, rub it off the plate. Do not save it for any artistic element it may have. Nothing is more annoying than an almost good negative. It is better to have it very bad than tolerably good.

In making your exposures, always time for the shadows; let the high lights take care of themselves. If this is not considered, the picture will be hard and chalky, without detail, and very annoying to the artistic eye.

A PHOTOGRAPHIC TRIP TO NIAGARA.

"Don't you do it, or you will get left;" but I did do it, and did not "get left;" that it. I a left with a fellow-amateur to Niagara, last August, on a little photographic trip, taking with me my battered "\$10.00 outfit" will be "Waterbury left and six dozen and plate"

The stance remarks were addressed to me

it old annutum who had waded through
the moneral "act" long after "dry" plates

it is a dyno, they were "no good;"

for a dylo by and it nodes to kick
and it monitors exercine and to-day be

o by a many and to-day be

When I told him I was going to Niagara Falls, and not only take my cheap outfit, but special plates alone, his eyes opened wide enough for a pair of stereo' lenses, and he gave me a host of reasons why I should invest in a "Darlot" or some other good lens. As for rapid plates "all nonsense; nothing like a slow plate for detail," etc., and after calling my poor, faithful Waterbury hard names, he left me.

Had not my Waterbury been my best friend when in amateurical troubles? Had it not caught many beautiful bits of Wissahickon and Fairmount Park? and from experience I had found instantaneous plates, STOPPED DOWN worth a great deal for time pictures.

And so last August, as the train rolled out of the Columbia Avenue Depot it contained two very happy amateurs, bound for Niagara. Our first stop was at Mauch Chunk, where we made about a dozen exposures of Mauch Chunk Valley and Switchback scenery.

We had six double plate-holders, and at night before turning in, we lighted our homemade, portable lantern; under its ruby rays changed our plates (each plate being numbered and its exposure, etc., carefully noted); awaking next morning just in time to get our outer men washed and inner men fed, before the train came up and whisked us "o'er the hills and far away." From the windows of our car we were able to "shoot" the Lehigh Valley pretty successfully, simply closing the edge of the window down on our cameras.

My shutter is about as plain a piece of furniture as could well be made, by tying a bunch of thin sheet rubber at the end of a brass tube, and fixing it under the shutter's catch: squeezing a rubber ball (being connected by a rubber tube to the brass tube), the bunch of rubber inflates and raises the catch of the shutter, giving it the high-sounding name of "Pneumatic Shutter." However I got some excellent results from it.

At 11.30 P.M., Niagara Falls Station was reached, and rain was the order of the night. We were almost washed away in getting over to the "bus," and as we rattled over the stoniest road, in the joltiest "bus," on the wettest night we had ever experienced; at each jolt trembling for the safety of our

"exposed and unexposed" plates; teeth chattering from cold; my friend suffering from toothache, and big rain-drops falling every now and then down our backs, from the leaky roof of the "bus, 'we did not feel very poetic; and the dreams of yesterday about crossing the Suspension Bridge by moonlight, the Falls tinged with silver, and the grand roar of the mighty waters filling us with awe, were all swept away in the stern reality of to-day. Niagara's roar only held a poor second place compared with the roar of the storm around us, and it was the perceptible swaying to and fro of the bridge, and not the roar of the Niagara, that filled us with awe.

After a long ride along the Canadian shore the Prospect House was reached, and upon settling down in Room "63," an examination of our plates followed, and preparations for the morrow were made. Several times during the night I awoke to hear a tinkling noise in the room, and at length found it to proceed from two glasses on the washstand; then it was that I awoke to the awful force of the mighty Niagara.

Neither of us will forget that morning: right in front of us bathed in glorious sunshine, abounding in beautiful rainbows, above a mass of surging, rushing water of a bright pea-green color; beneath a vast expanse of boiling snow-white foam, was the great Niagara. We arose hastily, unpacked our cameras, and for the next few minutes we were busy making exposures; the temptation being strong to go ahead till all our plates were finished. From the balcony, outside our window, the sight was a grand one; up the river just above the Falls great foam-tipped waves jostled each other about, as if anxious to hurl themselves over the awful brink; the clouds of spray that rose high into the air was indeed a pretty sight. Right across the river were the American Falls, with big rolling clouds over them; while away down the river, like a thin silken thread, could be seen the Suspension Bridge.

After breakfast we made a tour of inspection, picking out little artistic pieces of scenery, such as "Niagara seen through foliage," "An old frame building with Niagara for background," etc. Upon getting back to the hotel, we hunted up a dark,

dreary, disused cellar (its very darkness and dreariness bringing light and joy to our photographic minds) in which to change our plates.

In three days' time we had done Niagara to our heart's content; stood on its brink; taken it from above, below, and either side; not leaving our cameras idle a moment until our stock of unexposed plates dwindled down to none.

After a very pleasant stay, we packed up our traps—no heavy camera and stand, dippers, dark tent, and chemicals—but just a small, square box and a few sticks.

Upon getting home late at night, we could not resist the temptation of repairing to our dark-room just to develop a sample plate, and not until daylight did we quit. I am glad to say we both had good luck, and my "Waterbury" still holds a good place in the estimation of W. N. Jay.

GLEANINGS.

Among the optical novelties offering notable interest may be mentioned a paper which is not only impervious to water, but also luminous in darkness. This phosphorescent and impervious paper may be used for various purposes, which need not be mentioned here. What is more important is to give the ingenious process by which this paper is produced. Imperviousness is obtained by means of the bichromate of potash; and the phosphorescent property with the aid of a powder composed of the sulphurets of calcium, barium, and strontium. Here is the formula used:

The manipulation is the same as in the manufacture of ordinary paper. It is not said how long this paper will keep its luminous property, but it is probable that it will continue for several months. The same rays of light that render it luminous in darkness, also render it impervious to water, by the action of the bichromate of potash on the gelatine.

Mr. T. R. Lake has patented a new process for sensitizing photographic paper, communicated to him by Messrs. West. By it are obtained at the same time the sensitizing of the paper and the development of the image, avoiding the use of the silver salts.

The sensitizing bath contains bichromate of potash, sulphate of magnesia, and mercurial chloride. After exposure on a negative in the usual way, the print is submitted to the action of a bath composed of:

Gallic acid, 2 parts.

Ferrous sulphate, . . . 3 "

Sulphate of alumina and ammonia (alum of ammonia), 3 "

Hyposulphite of soda, . . 24 "

The alum of ammonia, the ferrous sulphate, and the hyposulphite are first deprived of their water of crystallization with the aid of heat; they are then pulverized and mixed with the gallic acid. This mixture may be kept for a considerable time, if not exposed to dampness. For one hundred cubic centimetres of water, three grammes of this mixture are taken; the solution is, therefore, three per cent. It is said that the hyposulphite and the ammonial alum of the developing bath prevent the oxidation of the ferrous salt, which allows the bath to be used for several days. About ten minutes are required for the development, and the excess of the bath is removed by soaking the print for half an hour in water slightly acidulated with acetic acid; after which the print may be dried and mounted in the usual manner.

MR. ROTHE makes known the following useful preparation to make wood incombus tible—a desideratum in all photographic establishments—which, on account of their light construction, and the use of alcohol, ether, etc., are liable to destruction by fire. This preparation consists of an asbestos paint, made as follows:

The conference age noted and ground

together, at a rather high temperature, under a millstone, so as to make a very fine and homogeneous composition. If necessary, a little color may be added to give the desired tint. It is impossible to set fire to wood or furniture coated with this composition.

At the last meeting of the London Photographic Society, the President announced that the number of persons who visited the exhibition of the Society during the menth that it was open to the public exceeded nine thousand, and that the sale of tickets realized one thousand dollars.

THERE is question of introducing the bichromate of soda in place of the bichromate of potash for photographic use; and two manufacturers of chemical products, Messrs. Potter & Higgin, of Bolton, have patented a process for manufacturing it. It is not yet known how this salt behaves with gelatine; but as soda is cheaper than potash, it may be possible to obtain bichromate of soda at a cheaper rate. Bichromate of soda is recommended, moreover, as being a more powerful oxidizing agent than the corresponding potash salt. This is plain when we take into consideration that the equivalent of soda being lower than that of potash, the bichromate of soda contains more chromic acid than an equal weight of bichromate of potash. This last consideration makes us fear that its manufacture will not be obtained in as advantageous conditions as is thought; for, whilst admitting the difference in value between soda and potash, the bichromate of soda contains more chrome—a substance still dearer than potash.

At the Edinburgh Photographic Society, Mr. Macbeth read a very interesting communication on the oxalate of iron developing bath, as modified by Mr. Audra, of Paris. The author has finally settled upon the following preparation:

Distilled water, ... 300 c.c. (10 fl. oz. 1 dr.)
Ferrous sulphate, ... 99 grammes (2 oz. 7 drs.)
Tartarie acid, (46 grains.)

and he takes one part of this solution, and .

three parts of a saturated solution of oxalate of potash.

The results were perfectly satisfactory, and great praise was given to Mr. Audra. What is especially interesting is that after having been used for some time, it is only necessary to add a few crystals of tartaric acid, and to expose the vessel to solar light to restore the bath after exhaustion. In this case, the action of the solar rays brings back to the condition of a ferrous salt all the ferric salt produced by the action of the air and the development of the plates.

The Photographic News gives a description, with illustration, of the process of Mr. Georges Scamoni for making electrotypes for photo-engraving. The inventor has worked this process at St. Petersburg for some years. The apparatus is very simple. The plate is plunged into a wooden galvanoplastic bath lined with lead and covered with gutta-percha and bitumen, applied hot. The bath measures four feet in length by eighteen inches in breadth and depth. The plate is in communication with a single element-pile, which is in the same bath. The plates used are of medium size. results have been obtained; but notwithstanding all the progress which has been realized in this kind of operation, much practice and great patience are required to succeed.

DECOLORIZING SOLUTIONS FOR PRINTED NEGATIVES.

UP to the present time, a solution of alum and citric acid has been used for decolorizing negatives developed with pyrogallic acid; but when the plate is allowed to remain too long in this solution, the image is dissolved by the acid, and the negative loses in intensity. Mr. B. J. Edwards finds that this may be avoided by adding a reducing agent, such as sulphate of iron; for as soon as the silver is dissolved by the acid, it is again reduced to the metallic state by the ferrous salt.

At the London Photographic Association, a discussion arose as to the best method for cleaning old gelatino-bromide plates. For a long time, the custom has been to plunge the plates into a bath of bichromate of potash acidified with sulphuric acid, as was done in removing collodion; but this bath being very injurious in its action should there be any slight cuts on the hands, it has been abandoned; and Mr. Ashmon found that by means of a warm solution of potash, in which the plates are allowed to remain for a very short time, followed by a washing in diluted nitric acid (five per cent.) and a good washing in water, the desired end was perfectly obtained .- Paris Moniteur.

FRILLING IN THE FIXING BATH.

Doubtless many amateurs have had their patience tried this last summer by this annoyance. I am happy, however, to say that for my part I have not had, during the whole summer, a single case of frilling.

In very hot weather, I utilize the property possessed by several salts (including hyposulphite) to render heat latent during the solution; for example, I made an ordinary fixing bath, the water of which, at the beginning, indicated 26° C. (79° F.); when the solution was complete, the temperature of the liquid had fallen to 16° C. (61° F.) By fixing in a vertical dish of thick porcelain, I had not the least difficulty in dissolving the bromide of silver of six negatives, without the temperature rising sufficiently to cause any frilling of the pellicle.—Bulletin de l'Association Belge.

RECIPE.

15½ grains of gelatine and 23 grains of nitrate of silver are dissolved in 5 ounces of water, and the solution allowed to cool. The gelatinized mass is now divided by means of a silver fork into shreds, and put into a solution of 30 grains of bromide of potassium in as much water as will cover the mass. In three hours the fluid is poured off, the emulsion is washed, melted, and reduced to a volume of one ounce.—V. C. DRIFFIELD in *Photo. Archiv.*

Wight recommends the following intensifier:

a. 5 grammes of gelatine are dissolved in

50 cubic centimetres of acetic acid, and then mixed with 100 cubic centimetres of water and filtered.

- b. 4 grammes of sulphate of iron, 120 cubic centimetres of water, and 10 cubic centimetres of a.
- c. 3 grammes of nitrate of silver, 100 cubic centimetres of water, and 4 cubic centimetres of acetic acid

After treating the plate to the alum bath, the above is flowed over till the desired strength is obtained.

BROMIDE OF SILVER GELATINE.

- 1.—Bromide of potassium, 370 grains; gelatine, 308 grains; iodide of potassium, 10 to 15 grains; water, 7 ounces.
- 2.—Nitrate of Silver, 465 grains; water, 4 ounces.
 - 3.—Gelatine, 465 grains; water, 16 ounces.

The first (No. 1) is warmed to 175° F., when No. 2 is slowly poured into it, with constant agitation, and the mixture is suffered to remain in boiling water for ten or fifteen minutes. It is then poured into No. 3, which must be at a temperature of 100° F.—J. M. EDER in Photographisches Archiv.

CLEANSING OF SPONGES.

For removing grease from sponges that have been in use for some time, M. Von Valta recommends the following: The sponge is first washed with water as well as possible, then placed upon a plate, a little powdered calcium chloride being sprinkled over it and allowed to liquefy; after about thirty minutes it may be washed with water and dried, when it will have the appearance of a new sponge.

Photography in Hospitals.—A photographic studio has now been attached to most of the French hospitals, for photographing the sick persons at different times. The rapid dry-plate process is employed. An electrically operated camera, devised by Prof. Charcot, of the Saltpétrière, is very useful in taking, in rapid successon, a series of views.

STRESOLBENING OF REDUCED NEGA-SIVIS—To many it may be desirable to know by what means a negative reduced by hiphate of copper may be strengthened. Hitherto I have used the direct agency of the sunlight. The plate gradually darkens to a purple-violet, and gives, when the exposure is proper, very beautiful impressions. But this plan was not applicable during the cloudy winter months. By experiment I, therefore, found that the ordinary oxalate developer (three pints of oxalate to one pint of iron, with ten pints of water) gradually strengthened the negative reduced by copper. The reduction by the copper salt (three parts common salt, one part sulphate of copper, and three hundred parts distilled water) is analogous to reduction with bichloride of mercury.

INTENSIFYING COLLODION PLATES.

The negative is dipped in a solution of bichloride of mercury until it whitens, then washed and poured over with a mixture of equal parts of the following:

- a. Water, 1000 parts; ammonia, 50 parts; bicarbonate of soda, 75 parts.
- b. Water, 1000 parts; pyrogallic acid, 6 parts; citric acid, 12 parts.

If the negative is too strong, it is dipped in a solution of: Water, 500 parts; hyposulphite, 120 parts; ammonia, 30 parts.

NEGATIVE VARNISH.

100 parts of spirits of wine; 15 parts of sandarac; 170 parts of bleached shellac; 85 parts of white shellac.

The shellac and sandarac are powdered and the alcohol poured on the powder, mixed with broken pieces of glass to prevent the gum from conglomerating, and the vessel well shaken to effect solution. It is then left stand for a month, when the clear portion is poured off.

GUM EMULSION.

- a. 6 grammes of gum arabic; 6 grammes of iodide of potassium; 50 cubic centimetres of distilled water. The solution is warmed and allowed to cool.
- b. 15 grains of nitrate of silver; 100 cubic centimetres of water.
- c. 12 grains of bromide of potassium; 15 grains of gelatine; 150 cubic centimetres of distilled water.
 - d. 25 cubic centimetres of distilled water.
 - A is poured drop by drop into b, and

the mixture of a and b in small portions into c, then d. It is then heated by a water bath and cut in shreds when cold, and solution effected by heat.

In order to render the pyrogallic developer durable, I usually add sulphite of soda (not sulphate or hyposulphite). Four ounces of soda sulphite are triturated in a mortar, and forty cubic centimetres of water added thereto, and stirred until the salt is dissolved. A few crystals of citric acid are then added sufficient to tinge litmus-paper red; ten grains of pyrogallic acid are added and sufficient water to make up one hundred cubic centimetres. The solution is then filtered and may be preserved intact for more than a year. In using the developer two mixtures are made:

- 1. 10 cubic centimetres of the above mentioned fluid; 120 cubic centimetres of water.
- 2. 8 cubic centimetres of ammonia; 160 cubic centimetres of water; 1 grain of bromide of ammonia.

The plate is laid in a shallow dish and as much of No. 2 poured over it as is necessary to completely cover it. The liquid is now poured out of the dish, and the plate treated to a solution consisting of twenty cubic centimetres of No. 1 and forty cubic centimetres of No. 2. If the negative has been properly timed, it will attain its minimum strength in a minute or so. If it has been over-timed, the picture will flash up too quickly; the developer is poured off, and the pyro solution (1) mixed with some of the developer poured over the plate. If the image does not appear in consequence of too short time, twenty cubic centimetres of No. 2 are added to the developer.

GERMAN CORRESPONDENCE.

Photography in Germany—Green Fog and its Removal—The Photo-gravure Process of Klio and Obernetter—Lewitzky's Photoelectric Gallery in St. Petersburg—Photographic Exhibitions.

It is well known that green fog arises, for the most part, from too long development of gelatine plates with pyrogallic acid, or with excess of ammonia. The same cause renders difficult the copying of gelatine

plates, and destroys the fine detail in the shadows. A number of plates which I developed, by way of experiment, with Cramer's developer, exhibited this green fog in a most striking manner. For its removal, Abney recommends a solution of bromide of iron, or a mixture of chloride of iron and bromide of potassium. Starting from the fact that the green fog is engendered from the reduced silver, I endeavored to remove it by a simple preparation of iodine, and with complete success. A solution of one part of iodine and four parts of iodide of potassium in one hundred parts of water, was diluted with ten parts of water, and the fogged plates laid in the solution. In a very short time the green appearance was changed to a yellow, by the formation of the iodide of silver. I allowed the plate to lie in the bath until the green color was no longer perceptible; I then dipped it in the hypo solution, in order to dissolve the iodide of silver formed. A minute is sufficient, and the plates are then thoroughly washed. All the plates thus treated were perfectly clear of the green fog, without having suffered the least in the detail. When the green fog is remarkably strong, and the treatment with the iodide solution has not been continued long enough, a trace will always remain; but this may be removed after the fixing, by repeating the same process.

For a long time it has been the aim of photographers to imitate Goupil's photogravure process, by which he has obtained such acknowledged good results in the reproduction of oil-paintings. Klio, in Vienna, first succeeded in producing sheets similar to Goupil's. Concerning his method, which has been purchased by several other German firms, the following has become public. It is known that Goupil produces a Woodbury relief, but whether he uses a mixture of sand with the gelatine to produce the copy is not exactly known. The Photo-gravure processes employed this side of the Vosges are the etching processes. The granulation is effected in a quite peculiar way. We have received the following communication from a foreign source. A copper plate is put in a dusting-case, in which asphaltum is finely dusted; the fine particles are thrown upon the plate like dust, and then carefully

melted by heating. Upon this plate a pigment print, copied from a positive, is put, and then follows the etching, which is done with solutions of chloride of iron, of various strengths-the strongest being used first. These coagulate the gelatine, and operate, in consequence of this, only through the thinnest layers upon the shadows. weaker solutions are next applied, which penetrate through the thicker layers; and the weakest of all through the thickest (corresponding to the highest lights). In this manner the shadows are etched first of all. next the half tones, and finally the highest lights. The asphaltum particles give the necessary granulation. According to our authority, the plates are etched very superficially, so that they cannot be electrotyped, and only a limited number of copies can be taken from them; and even to obtain these, care is required. Obernetter has discovered an entirely new process, which depends upon the application of his gelatine plates. He prepares a negative therefrom, transforms it in chloride of silver, and transfers it to copper. The chloride of silver etches the copper, and produces a plate of sufficient depression, from which an electrotype may be made. The impressions made by this new process have just been laid before the Society for the Progress of Photography by Herr Milster, a recognized authority on the graphic art. He declares that, in fineness of detail and richness of tone, they exceed everything of the kind which has hitherto been produced in Germany in imitation of Goupil's method. There is one peculiarity about this process which makes it of especial importance, and that is, that the impressions are made from the original without the aid of retouching. This is to be noted, since the photo-gravure plates always require more or less retouching, making them more expensive, as the work can only be trusted to skilled engravers. Moreover, it is hardly pre ible to judge from a photo-gravure of the character of the original, since we cannot full how much is due to the engraver, and how much is the work of the artist. The photocravenes which have hitherto appeared in Germany show not seldom a failme in the heat, which is to be traced to the care that the very flat plates will not

admit of sufficiently deep printing. Moreover, electrotypes from the same are not admissible. On the contrary, the Obernetter proofs are surprising for the wealth of tone in the lights, and the process admits of electrotyping, by which any number of copies may be produced.

We have read here with great interest the discussion about Kurtz's and Van der Weyde's method of electric illumination for portraiture, which took place at the Photographic Section of the American Institute. Here the system meets with hindrance, inasmuch as the driving force necessary for the working of the dynamo machine would not be allowed admission by every house-The Messrs. Lewitzky, of St. Petersburg, have been compelled to discontinue the use of the electric light. Mr. Lewitzky, Sr., remarked at the last Assembly of Photographers that the landlords were opposed to the further use of the gasmotors. The President, while expressing his regret that St. Petersburg should lose so desirable and valuable an application, considered it worthy of commendation in Mr. Levitzky that he should have exerted himself so strenuously in introducing the electric light, of whose value and importance many members had convinced themselves by a visit to Lewitzky's atelier. He thanked these gentlemen in the name of those present.

At present there is no lack of photographic exhibitions. Scarce was that of London completed ere that of Brussels began—the latter an international one. For next year several are already laid out. Berlin has projected two expositions: a national one under the auspices of the German Photographic Society, and an international one. We have very many associations—perhaps too many—in Germany, and the harmony amongst them is not the greatest. Two of the most extensive are opposed to the project of an international exposition.

Truly yours,

Dr. H. W. Vogel.

BERLIN, January 6, 1884.

Secure a copy of Mosaics for 1884 and you will be greatly benefited.

A DOT FROM THE WEST.

UKIAH, CAL., December 23, 1883.

Editor PHILADELPHIA PHOTOGRAPHER: By mail with this, I send you specimens of my dry-plate work, which I think equal to any you have published. 1. The large head is of a boy eleven months old, light complexion, and light-yellow hair. Eastman plate, six and a half by eight and half; oxalate developer, time half second. 2. The boy on the chair-back, is the same subject, two years old. Williams' (San Francisco) plate, four and quarter by five and a half; one and a half second, oxalate. 3, 4, 5, are Williams' plates, two seconds, oxalate developer; 5-7. Some of them are a little worn from having been handled, but I could print no more now on account of bad weather and press of Christmas work.

I have your Photographics, and have profited immensely by its use. I have the same fault to find with it that pervades all publications for our benefit-too little account made of development. It seems to me that the varying conditions of the other chemicals and agencies, i.e., bath, collodion, and exposure, may almost be met and subdued by a proper handling of the developer. I am entirely unlearned in chemistry, and have studied photography by the light of experience and books, having never had any instruction otherwise, and, therefore, cannot give my views or summarize results as you could, and should in future editions of the Photographics. The great fault with all the publications-magazines-is that they deal too much with questions which are out of the reach and too advanced for country photographers. They become scientific rather than practical in their handling of the art.

I think I have discovered the true cause of most of the blistering of albumen paper—perhaps not. Having believed for some time in the change of temperature theory, I have been experimenting this winter in that direction; and though I have alternated my prints in water too hot for the hand and freezing cold, I could not cause a blister. But heating a sheet when fresh off the bath by drying it too fast with alcohol, blisters them quick enough when they go

in the wash. I may be all wrong, but this is what results with me.

Excuse my temerity. I am in a town of only twelve hundred inhabitants, so that I am a larger frog than I would be in Philadelphia.

Yours respectfully, A. O. CARPENTER.

PHOTOGRAPHIC STOCKDEALERS AND MANUFACTURERS' ASSO-CIATION OF AMERICA.

New York, December 15, 1883.

DEAR SIRS: At the regular monthly meeting in New York on the 11th inst., of the Special Committee, consisting of Colonel V. M. Wilcox, of New York, Chairman; W. Irving Adams, of New York, Secretary; and Edward Cope, of Philadelphia, appointed by the President of the Association in accordance with a resolution adopted at the adjourned Annual Meeting of the Association, held at Milwaukee, August 8, 1883, "for the purpose of harmonizing and correcting any seeming grievance and abuses in the trade," it was unanimously resolved that, in the opinion of this Committee, "Concert of action between the Manufacturers of Dry Plates and Photographic Merchants is essential to the maintenance of the established schedule of prices, and to the development and preservation of that friendly feeling, the existence of which is so desirable among the members of our trade, and that it be requested of the manufacturers to adhere in all their quotations and sales to consumers to the fixed schedule of discounts." All of which is respectfully submitted on behalf of the Committee by

> W. IRVING ADAMS, Secretary.

DUTY OF EMPLOYES TO THEIR EMPLOYER.

Of the many assistants employed in photography how very few of them really look to the interests of their employers, yet expect and demand good salaries? In a great many cases, the employé will simply fill in time mechanically, so many hours per day, seldom taking into account the amount of

work he is producing, whether he has earned his pay, or if his work is first-class. They shirk the responsibilities of their positions, are always ready with excuses, and seldom, if ever, come up to the mark, unless the employer is constantly punching them up, and following their every detail. And yet when paid the small salary of from six to eight dollars per week for printing, or from eight to twelve dollars per week for operating, they complain of not being appreciated, and that there's no money in the business (as they term it) any more. There are many such croakers, who plod along week in and week out, who never really understand the manipulations through which they pass their work, and never try to learn them. They do not read photographic literature, never try anything new, never clean up in cloudy weather, but instead, constantly complain that there is no money in the business. They expect more pay, yet do not make themselves worth it. Printers seem more apt to fall into careless ways than operators, probably because they are in a room away from the employer, who is either operating or superintending his business; it may be that the lack of the employer's supervision makes them careless and slovenly. I contend that if a man is careful in saving wastes, does not overprint many, tones evenly, etc., in fact, is thrifty-tries to get the most work off, does it promptly and well, and is reliable, he will never want for a position and a good salary. Too many printers are merely mechanical, never displaying much (if any) feeling and judgment in their work, which requires as much judgment as that of an operator; and to do so, the printer must school himself. He must not be satisfied with "good enough," but constantly seek to improve and make himself invaluable to his employer, and then he can demand good pay. At present, salaries are low compared to what they were six or ten years ago, yet high salaries are paid now as well as then to good men, as such men are really scarce. One seldom knows of a thorough, first-class workman being idle any length of time; on the contrary, he is sought after, and is always in demand. Still, salaries, low as they are, in many cases are still better than those

paid in England and Europe. A first-class operator and poser in London scarcely ever receives over thirty dollars per week, while much more is paid in any of our large cities. Printers who manage the work for a large establishment receive, in America, as much as thirty-five dollars per week, while rarely, if ever, more than sixteen dollars per week is paid in London for the same work. Cheap prices may be a detriment to good wages, as in some instances carpenters, conductors, etc. have been run into a printing-room, and have learned the mechanical part of printing, and considered themselves experts -thus hurting really good men. Still, a man can scarcely expect to receive fifteen dollars per week when he makes himself worth but ten; he must first show that he is worth fifteen before he can demand it. Only the old croakers say that there is no money in the business any more, and that the chances of financial success are few. To succeed, you must understand your art, and possess some management. Our prominent photographers are but human; they must all die sooner or later; others will take their places. Here's your chance, if you want to become a proprietor. Another great drawback among photographers is the liquor question-so many of our best men have been ruined by drink. Is there an appetite created by our work? It is a fact that when a new assistant is engaged, the question whether he is a steady man, is among the first that is asked. W. H. R.

GETTING AHEAD.*

RY M. P. BROWN.

Another year has quickly passed, and the invitations are out to contribute our mite for Mosaics.

I gladly respond, as I would feel lost without our little friend. It gives such broad hints to look over our work for the past year, and see how much we have gained. Like the compass, Mosaics always points one way—toward progress; and the photographer who desires to make a success of his business should read it, and profit by

^{*}Written for Mosaics for 1884, but received too late.

its teachings. I feel that I owe it very much more than I can repay, as I have found it to be a valuable help on many occasions. I can see a marked improvement in the quality of my work since I began reading photographic publications, and I feel that each year I am getting ahead. I can also see that my patrons are mindful of my progress, and are pleased to see me succeed. By careful management, and a fixed purpose in view, I have built up a business that gives me a moderate income above my necessary expenses. Experience and observation teach me that photographers (as a rule) are slaves to their business. They abuse themselves, and destroy their nervous systems in endeavoring to satisfy the wishes of a never satisfied public. After such an experience for eight years, I concluded it did not pay. I began to take better care of myself; I make the preservation of health of more importance than the growth of business. I now take time to eat my dinner, and chew my food while eating. How many of you do this; especially when it is a very busy day? I saw my own wood for the exercise it gives. I keep a horse, and find pleasure in the care and use of him.

My plan of "locate, and then stick," has been the secret of my success; and having a successful business has enabled me to enjoy many comforts which I could not otherwise have had. Did photographers study and practise political economy, as well as how to make fine pictures, and then combine successful management of the business with careful handling of the sitter, there would be less galleries for sale on account of poor health. And when the invitation came to write your article for Mosaics, you could look over the work of the past year, and rejoice at your progress.

[To be continued.]

SOCIETY GOSSIP.

Photographic Society of Philadelphia.—The regular meeting was held on Wednesday evening, January 2, 1884, the President, Mr. Joseph W. Bates, in the Chair. Thirty-two members were present.

After adopting the minutes of the last

meeting, the following new members were elected: Messrs. J. Vaughn Merrick, Edward Cohen, William L. Springs, William A. Haines, William G. Platt, and Dr. J. Frank Lewenberg. Nine new members were proposed for election at the next meeting.

Dr. Jordan, referring to the question discussed at the last meeting regarding the action of the bromides of potassium and ammonium, read the following extract from a letter he had received from Mr. G. Cramer:

"I use both the bromide of ammonium and of potassium, because the effect of both salts is a little different on the sensitive film, although their restraining action is the same. You will find the same principle in using different iodides and bromides in collodion, such as iodides and bromides of ammonium, potassium, cadmium, lithium, etc., for a similar reason."

In the Question Box were found the following questions:

1. Is a swing-front to a camera—that is, so that the lens can be made to stand at an angle to the ground-glass—an efficient substitute for the swing-back?

They were considered to answer the same purpose, providing that with the swingfront the lens could also be moved up and down, so as to bring the picture in proper position on the ground-glass.

2. Are there any disadvantages in using a very small diaphragm? Does it make a less brilliant result?

Though many members were in the habit of using small stops with apparently no loss in brilliancy, particularly where the light was very powerful, it was said that ordinarily stops smaller than F. 30 to 40 tended to give a flat picture, with loss of atmospheric effect. A rapid lens, used with as large a stop as was consistent with sharpness, would produce the most brilliant pictures with an ordinary light.

3. Do negatives that have not been intensified ever get more intense by age?

If unvarnished, wet plates were said to become much more intense in a few years, as would also unvarnished dry plates if much printed from, or if intensified with mercury and cyanide of silver. Exposure to sulphurous vapors also would darken a plate. Some members had dry plates taken as early as 1875 which were unchanged.

The subject of a public lantern exhibition was discussed, and a committee was appointed to take charge of the matter of giving an exhibition of the best productions of the members and other first-class work.

With a view to encouraging the younger members to show their work for criticism and advice, and to exhibit to members and their friends the work of the Society generally, a committee was appointed to consider the holding of occasional exhibitions of the work of the members alone.

Mr. Edward L. Wilson introduced to the Society Mr. George Hamner Croughton, an artist and photographer, of London, and a member of the South London Photographic Society, who had recently made his home in Philadelphia, and who had attended with interest several meetings of the Society.

Mr. Hood showed a new developing lantern, made by the Scovill Manufacturing Company, using orange instead of ruby glass, and arranged so that glasses or paper of different colors could be slid into grooves in front of the original glasses of the lantern, thereby modifying the color or intensity of the light.

Mr. Carbutt also showed his lantern, modified to use orange glass covered with orange tissue-paper.

After a lantern exhibition, the meeting adjourned.

ROBERT S. REDFIELD, Secretary pro tem.

Association of Operative Photographers of New York. — Minutes of the meeting held January 2, 1884. President Charles Shaidnor in the Chair.

The usual foreign and domestic journals were received with thanks.

Mr Hallenbeck presented to the Association a bound copy of Vol. XIII. of the Photographic Times.

A special vote of thanks to the Scovill Manufacturing Company and W. Irving Vdams, Eq., was passed.

The Secretary announced that Mr. F. C. Biven, of the Secretary American, had vol-

unteered to exhibit at the next meeting of the Association an enlarging camera of his own construction, and to give other illustrations and demonstrations appertaining to reproductions and enlargements, and moved therefore that the discussion on enlargements now in order be postponed till next meeting. Motion carried, and the Secretary instructed to issue special invitations to the next meeting.

Only a small number of members being present, no regular discussion was held, a few of them, however, conversed freely on several interesting topics, viz:

The use of foggy plates. Emulsion fog, or when light-struck, the plates can be cured of the evil by exposing them to the action of a weak solution of a bichromate, and afterwards thoroughly washing; the sensitiveness will however materially decrease. A long-continued development will cause a foggy deposit of metallic silver, similar to that of a wet collodion plate, or the mercuric deposit upon the daguerrotype under the same circumstances. Green fog has been shown by Abney, Woods, and Vogel to be also finely divided metallic silver, which occurs principally when one of the silver haloids in the emulsion is very soluble in part of the developer (ammonia).

Newton's mercurial developer has been tried by several, and with success. With it the time of exposure is reduced in the proportion 10:7. It can be equally well used with ammoniacal, potassa, or soda developer. The negatives fix slowly and lose much of their apparent intensity. The process is yet too little known to express a distinct opinion about it.

A formula for the preparation of eau de javelle was given, viz.:

Dry chloride of lime, . . . 2 ounces. Carbonate of potassa, . . . 4 " Water, 40 "

Mix the chloride of lime with 30 ounces of the water, dissolve the potassa in the remainder of it; mix, boil, and filter.

Frill has happened to one member recently, which quite astonished all present, as the plates upon which it appeared, the temperature of the season, and the developer used would hardly warrant such annoyance. Sulphate of magnesia in the developer, and terchloride of iron in the washing waters, were mentioned to be excellent anti-frills.

After other formulæ and modes of operating were spoken of, the meeting adjourned.

CHARLES EHRMANN,

Secretary.

CORRECTION.

The report of the meeting of the Association of Operative Photographers of New York of December 5, 1883, as given in your January number, appears in a state of mutilation.

The gentleman who so prominently took part in the discussion, and who demonstrated the process of printing on bromogelatine paper, is Mr. T. C. ROCHE, the photographer of the firm of Messrs. E. & H. T. Anthony & Co., 591 Broadway, New York.

A Mr. Roder or Mr. Rocher was not present at the meeting, neither are such gentlemen known to the Association.

Very respectfully, your obd't servant, Charles Ehrmann.

ROCHESTER PHOTOGRAPHIC ASSOCIATION.

—Regular meeting, Monday evening, December 31, 1883. President J. M. Fox in the Chair.

Minutes of previous meeting read and approved.

After some routine business the Secretary read a communication from Mr. Edward L. Wilson, of the Philadelphia Photographer, extending best wishes for the welfare of the Association, and a telegram from the Messrs. Anthony, of the Bulletin, offering congratulations and compliments of the season to the new R. P. A. The communications were ordered filed, and Messrs. Anthony and Wilson thanked for their courtesy.

In the Question Box were the following questions:

- 1. What is the cause of woolliness in albumenized paper prints, and what the preventative?
- 2. What is the best way to keep mounted prints previous to burnishing?
- 3. What office does gold perform in the toning bath?

4. What is the cause of greenish fog in dry plates, and what is the remedy?

Mr. S. D. Wardlaw, Chairman of the Question Box Committee appointed at the previous meeting, said that the questions to be answered were received so late that the Committee had had no time properly to consider the subjects, which was to be regretted, as the topics were of vital interest.

In regard to Question 1, Mr. W. said that although he had not, at this time, given any study to the question, still it had at times been brought very forcibly to his notice. and had caused him considerable trouble. Woolliness, he said, was of two kinds; one where the fibre of the paper showed through the albumen—this kind is more noticeable in albumenized Saxe paper, especially if it has been albumenized some time-and is caused by the albumen sinking into the paper; this kind of woolliness shows no regularity in its markings, but is distributed all over the sheet. The other is of a "checkered" appearance. If it is observed closely, it will be found to run almost entirely in one direction, that is, if a cabinet print stretches in length, the woolliness shows in lines across the print; if in width, then lengthwise of the print. If a double albumen print is left unmounted, no matter how long a time, it will always burnish with a good glossy surface; but cut the print in two, mount one-half and let it dry thoroughly, and burnish both the mounted and unmounted pieces, and you will find the mounted print shows this woolliness, whilst the unmounted piece polishes beautifully. The reason is, the print, when mounted, was stretched, and whilst wet the soft albumen surface yielded to the stretch of the paper, but, in drying, the paper could not contract with the albumen, on account of its adhesion to the mount, hence the "checkered" appearance in the opposite direction to the stretch of the paper. The albumen, which until now was one perfect sheet, is torn apart, and as it has been rendered insoluble by the action of the sensitizing bath, no subsequent moistening of the surface can join them again. Dampening the print before burnishing will help considerably, but the woolliness will eventually show. The only preventative is to keep the prints damp

until lubricated and burnished. The best way to do this, Mr. W. thought, was to lay the prints face up, as fast as mounted and rubbed down, on the damp cloth of a stretcher inside, the frame of stretchers of course making a series of drawers, as it were, and piling them one stretcher on top of the other as fast as filled on a flat glass or board on top of all to keep in the moisture.

Mr. Fox. Does paper albumenized on the wrong side show woolliness?

Mr. W. said he had never noticed a case of wool on paper so albumenized.

Mr. F. said he never had either, although he often had paper that was albumenized on the wrong side.

Mr. Nilson said he had used colored blotters to keep his prints in until he was ready to burnish, and had found no injurious effect.

Mr. W.'s objection to prints being left in blotters was the deleterious matter contained in them. He had seen samples of white blotters which, on analysis, showed considerable hypo.

Mr. Bacon asked what was the effect on prints from being left in the blotters?

Mr. W. If the blotters are very damp, it will destroy the prints. They will show in places as if strong hypo or weak cyanide had been in contact with them.

Mr. Fox thought a plan that worked well was to pile prints all together after mounting, thus letting them dampen evenly all through. Of course, this only answers with plain mounts, enamelled or printed backs would not work.

Mr Pomeroy thought the best plan would be to burnish right after mounting.

Mr. Stone thought if the mounting was done in the evening it would make quite a difference whether one worked for him or not.

Question 2. Toning. What office does gold perform in the toning bath.

Mr. W. said that when an alkali is added to enlaride of gold an action is set up which precipitate the cold in solution or as reduced chlorida of fiver on the print, gradually I decug the color of the print from a case, from the adder of purple, and if car-

ried farther a bluish color. The benefit of gold toning is twofold: it gives to the print a more pleasing color after fixing, and as gold is not so easily acted upon by the elements as silver, therefore it is more permanent. When warm brown tones were fashionable, there was more complaint made of faded prints than with the old-fashioned black tones.

Mr. Pomeroy thought that the new platinum toning ought to be a decided benefit in this direction.

Question 4. What is the cause of green fog in dry plates, and what the remedy?

Mr. W. said green fog was undoubtedly something in the chemical construction of the plates, as some plates would show it to an alarming extent, whilst others would only show it on being forced with ammonia—acid in the developer would prevent it.

Mr. Nelson. What is the objection to green fog?

Mr. W. With green fog in the shadows you have to make your negatives so much stronger to counteract the veiling. For instance, a negative that is just right is thin, showing the fine texture of the flesh and drapery, with enough sparkle to make it brilliant, but if green fog is added it becomes much flatter. As you cannot eliminate the fog, you have to add strength to the negative to preserve the proper balance between the lights and shadows, thereby losing the delicate half-tones and injuring the printing quality of the negative.

Mr. Bannister agreed with Mr. W. in

Mr. Lee. What is the objection to acid in the developer?

Mr. W. The less added to a developer the better; besides, it keeps back the detail in the shadows, especially if the negative is in the least under-timed.

The President then announced the subject for discussion at next meeting: Dry Plates vs. Wet Plates.

After balloting for new members, and collection of fees and dues, the meeting adjourned.

W. J. LEE, Secretary

THE DRY-PLATE MAKERS IN CONVENTION.

It is sometimes real "fresh" to hear what others say about our industries, and so we reprint the report of the late convention of the Dry Plate Makers entire, as it appeared in a Cleveland daily as follows:

The Dry-plate Manufacturers of the United States have been in session for three days past, at the Kennard House parlors. The reader may not know what a dry plate is, and yet it is more than probable, if he has ever had his picture taken, that he has contributed his mite toward the dry-plate industry.

Formerly, when the customer visited a photograph gallery, he heard a squeaking noise proceed from the mysterious dark room. It was the artist cleaning the glass negative plate. A pungent odor of chemicals floated out to greet his nostrils, and soon the artist emerged with an enclosed sort of a wooden portfolio. That contained the wet plate. It was inserted in the camera, and when the victim had been fitted into his rack of torture and the camera aimed at him, he was told to sit perfectly still, and the camera was opened. Then, for what seemed to him like an interminable space of time, he sat and looked stiff and unnatural, while the artist, watch in hand, timed him. Now all this is changed. Instead of the tedious task of cleaning and coating the plate, the photographer buys them ready prepared, and being dry when they are inserted in the camera instead of wet, as under the old regime, they are denominated dry plates. A solution of bromide of silver is applied to the plate by a manufacturer who makes a specialty of the business. It is dried by currents of air flowing over it, sometimes for a period of eight hours. Great skill is required in its production, and it is somewht more expensive to the photographer than the oldfashioned wet plate, but the benefits accruing from the improvement more than make up for its additional cost. It is only since dry plates have been introduced that photographers have been able to take good pictures on dark days or even with artificial light.

Nowadays when one goes to have his face immortalized, the chemicals that used to invest a photograph gallery with such an awe-inspiring smell are not present. The subject is told to assume a comfortable position, the operator darts into the dark-room, emerges with a dry plate sheltered from the light in the slide, having inserted which, he pulls the cap off the camera, in a minute or less and before the subject has had time to wink, the operator says, "That will do, thank you," and all is over.

An ingenious device for street photography has recently been invented. The photographer carries the compact camera on his shoulder, and when he sees a pretty face in repose a moment, he aims his instrument, gets a focus, and touches a spring. A slide perforated with a hole drops down and in its fall it exposes the plate the merest fraction of a second. In that time, however, a good negative is obtained.

The dry plate is the result of more than fifteen years' experiment, and it is a little remarkable that most of the discoveries that have led to it have been made by amateurs. The prime discoverer of the process was an Englishman. The manufacture of these plates has, during the past five years, grown into an important industry in the United States, where there are now twenty-eight firms that ship plates all over the world. A large order was sent by a Philadelphia manufacturer to India, of plates thirty by sixty inches in size, and Chinese photographers buy their plates in America. The plates cost from sixty cents a dozen to seven dollars apiece. The utmost care must be taken to never expose them to the light until used for a negative, and for this reason they are packed in a dark-room, whose only light comes through a red or orange glass. The box must never be unpacked save in a photographer's dark-room.

The following were the delegates to the Annual Convention of the Dry Plate Manufacturers' Association of the United States, which finished its deliberations at the Kennard House, last evening: G. Cramer, Dry Plate Works, St. Louis; C. E. Chase, Chicago Dry Plate and Manufacturing Company; John Carbutt, Philadelphia; Messrs. Taylor & Green, of Rockford, Ill., are rep-

resented by Mr. Taylor; George Eastman, Eastman Dry Plate Company of Rochester; William H. Reid, of the firm of Inglis & Reid, Rochester; G. H. Monroe, of the Monroe Dry Plate Company, Rochester; J. P. Ourdan, Hub Dry Plate Company, Providence, and T. H. Wilson, of the M. A. Seed Dry Plate Company, of St. Louis.

One of the first steps of the convention was to organize a permanent association with the following officers: President, John Carbutt, Philadelphia; First Vice-President, G. Cramer, St. Louis; Second Vice-President, C. E. Chase, Chicago; Secretary and Treasurer, George Eastman, Rochester.

This is the second annual meeting of the Association held at the Kennard House, and the Association, determined to hold the next annual session at the same place. Aside from the formation of a permanent organization, one of the objects of the convention was to endeavor to harmonize the interests of manufacturers, dealers, and consumers. Of the twenty-eight manufacturers in the United States, only ten are members of the Association, and there is considerable cutting on prices. This, as well as other branches of industry, has its drawbacks. By actual count it was shown that seventy or eighty firms have gone into the business in Great Britain, only to give it up.

"And yet we American manufacturers," said one of the Association, "have to pay an ad valorem duty on the materials which we are obliged to import for the manufacture of dry plates, and our prices are but little in advance of those of European manufacturers. We import all our glass. Why? Because Americans have not yet learned to make glass that will answer our purpose. Our glass comes from France, England, and Belgium. American glass manufacturer- may not be able to make good enough glass for us, but they have been able to send the price up about fifty per cent. recent strikes and lockouts are to blame for it, European prices being influenced by the strike. It would take more than a year to remedy the army asce if the works down in the Pittings region and elsewhere Leui I resinue budices to morrow. Take, for tance, a box of fifty feet of our glass;

the price has advanced one dollar and sixtyfive cents on that box. There is one manufacturer who uses seventy-five boxes a day. That amounts to an increase of one hundred and twenty-one dollars and seventy-five cents per day in the cost of his material."

[There was nothing done at the convention except "harmonizing" and discussing the practical interests of the craft at large. Good, practical men are these "dry" people, and we look for nothing but good from them.—Ed.]

A FRIENDLY VISIT.

QUERY.

CAN any reader of the PHILADELPHIA PHOTOGRAPHER give a formula for preparing common crayon paper for enlargements by development, using a lantern and common kerosene lamp?

Some time ago I developed a Cramer plate with Monroe's developer, which brought out the image all right; but as soon as I immersed the plate in the hypo it vanished, and after the plate was fixed I could hardly see any image at all. What was the matter? Could such a plate or picture be reclaimed; if so, how? Again; I developed a Cramer plate with his own developer, then developed a Monroe plate directly after with the same developer, and then used it on a second Cramer plate, with the same result as the one developed with Monroe's developer-the entire loss of the plate. In my ignorance, I argued that a developer that would work with one plate ought to work with another; but I found out by the above experiments that it would not. But I could not, and cannot yet, see why the first one should vanish in the hypo after apparently coming out all right in the developer. Perhaps some one can enlighten

JOHN C. PATRICK, Batavia, N Y.

Q. What can be added to a cyanide fixer to prevent dark stains upon the film?

S. L. PLATT, Elgin, Illinois.

Q. Is there anything in which prints can

be immersed before toning to prevent grayness, or from showing the red spots?

S. L. PLATT, Elgin, Illinois.

Q. Can good work be done under a south light, and would it be advisable to move from a poor location with a north light to a good location with a south light?

L. W. ZUVER, Salamanca, N. Y.

A DISCUSSION ON PRICES.

TO BE CONTINUED UNTIL THERE IS A REFORMATION.

WITHOUT desiring to hurt any one's feelings, we desire to discuss the matter of prices. Recent travel in a number of our cities has revealed to us such a sad state of affairs among our craft as we had no idea of. We have heard the plaintive cry of the sufferers time and again in our conventions, but have shared in disregarding it because it was (and still is) our impression that the thing can never be "resoluted" right, in a convention. The subject is too deep for that; and at the risk of losing fame, and even friends, we are going to try to do some good in the direction so much needing help. First, we shall generalize; then hold up before you some good examples of those who obtain good prices; and then try to help win your patrons and you to better prices.

First, a few facts:

Don't you know that there are men who have no right to write "Photographer" after their names; who are very inferior as artists or workmen, and who are not as well qualified to practise as some of the medical quacks? This assertion is not to be disputed. In this profession, as in other professions, we cannot particularize. There must be a fixed standard, up to which all persons engaging in the profession must be required to be educated if we would protect one of the most important branches of art employed for the comfort of humanity, and such a requirement is also necessary as a prevention of much loss. A bad photographer may do evil almost incalculable. He does not only, through ignorance, do a permanent injury to those who are so unfortunate as to fall into his clutches, but artistic photographers must help to bear the burden

of his transgressions. Condemn one, condemn all. That is customary. Lose faith in the skill of a physician, and all physicians share the brunt of the reproach of the disappointed victim. And this suggests the thought that the reputable photographers of the country do not lay sufficient stress upon the importance of discouraging that class who are practising ignorantly. They should, out of the love which they should have for the advancement and perfection of their science, and also out of the love which they should have for the well-being of those whose servants they are, discourage bad work and low prices. One brings the other. That they do not is suggestive of laxity, of retrogression, of bad faith, and, in a word, of a demoralized state of the profession.

It is noticeable and commendable that such wholesale toleration of quacks is not permitted at the bar; it is not even permitted in that most God-given of all callings, in which to engage is commendable even in the most ignorant person-the pulpit, the profession of preaching the gospel. In no other profession is incompetency so much tolerated or so widely existant as in that of photography. And where's the blame? It rests with the profession itselfthose whose duty it is to purify their ranks, and make at least a presentable appearance to the public to which they look for support. They must take cognizance of this crying evil, and purge the profession of the running sores, the canker-worms that are absorbing their very existence. Let them name the quacks, and the local press will only too gladly repeat them to the public as a matter of protection.

But first raise your own prices.

Now, what shall we do about it? Think over it a month, and we will make a suggestion.

THE CINCINNATI CONVENTION.

Although no special arrangements have as yet been made in the matter of the Convention, the committee is actively engaged in its endeavors to make it even more successful than it was the last year.

We give this timely notice that the photog-

raphers of America may prepare themselves to outstrip what they did so well last September. They will have every opportunity to display their best work, and we send this notice forth as a herald, that there may be no complaint that the summons did not reach everyone in time. The value of the free interchange of ideas should be appreciated by every photographer. There can be no progress but that which is along the line of combined effort. No one, no matter how great his knowledge or skill, will advance if, hermitlike, he shut himself up within the bounds of his own narrow opinion. Something is to be learned from everyone, and unless there be a mutual relation among the fraternity there can be no harmony, and, of course, no advance. Our art needs this freedom in the circulation of opinion. not fear criticism, or that your neighbor will outshine you. Resolve that he shall not outshine you, but that your work shall be the highest your skill, your knowledge, and the knowledge of others shall make it, and you will succeed. You yourself will reap a rich harvest in your own satisfaction, and in the consciousness that you have put your shoulder to the wheel to advance the cause of our noble art.

Do not fail to attend the convention; you will not regret it. Those who exhibit one year are just those who are anxious to get a place the next year. This is proof evident that they know how to value it and the full measure of the harvest it yields. The Executive Committee meets shortly, and full particulars will appear in our next issue.

BIBLIOGRAPHY.

WE have recently been favored with a number of works having a special or general bearing upon photography.

As usual, we have received, through the kindness of K. Schwier, The Deutcher Photographen Kalender, or Day-book and Almanae for 1881, full of matter of value in interest to the profession.

From Dr. Ed. Liesegang, of Dusseldorf, his Photographischer Almanae and Kalander, which is enriched with gleanings from a wide field of practical hints and suggestions. An excellent portrait of the renowned Dr. Schnau embellibe the front.

From the same we have received a pamphlet, entitled *Die Heliochromie*, a historical sketch of all that has been accomplished in that branch of photography which has engaged the attention of scientists since the time of Niepee—the taking of pictures in their natural colors. The work is a concise and comprehensive survey, and full of interest

So great has the demand been for Paul E. Liesegang's manual, *Der Kohle-druck*, or Carbon Printing, that the author has been obliged to issue a new edition. The work is profusely illustrated, and contains the latest experiments in this branch of permanent photography.

The name of Dr. J. M. Eder is sufficient endorsement to a work on any subject connected with photography to make it sure that the work is worth reading.

We have before us Dr. Eder's Chemical Effect of the Spectrum, translated and edited by Capt. Abney, R.E., F.R.S. The book is small, containing only ninety or so pages, yet it is doubly surcharged with matter of the greatest interest. Its value cannot be too highly estimated.

The practical photographer is apt to regard such works as of no value but to the scientific man or the theorist, but if any progress is to be made in the art, it will result only from the conscientious and careful investigation of the matter in the manner in which it has been done by the author of this book.

The notes appended are rich in suggestion, and add materially to the value of the work.

CURIOSITIES OF A COPYRIGHT CASE.

To show how ingeniously some lawyers puzzle their brains to libel photography, we make the following extracts from the transcript of record in a late session of the Supreme Court of the United States (October Term, 1883, No. 1071), in the matter of The Burrow-Giles Lithographic Company, plaintiff in error, vs. Napoleon Sarony. In Error to the Circuit Court of the United States for the Southern District of New York.

COMPLAINT.

"That heretofore, about the month of

January, 1882, this plaintiff made an agreement with one Oscar Wilde whereby the said Wilde, for good and valuable consideration paid and to be paid to him by this plaintiff, sold to this plaintiff his, said Wilde's portrait, and granted to this plaintiff the sole and exclusive right, privilege, and authority, so far as he could confer the same, to make, publish, sell, and dispose of portraits of him, said Wilde, in the United States; and that under and by virtue of said agreement this plaintiff made, invented, and designed a certain photograph and the negative thereof of and from him, the said Wilde, at his, this plaintiff's, place of business, in the United States, and within said southern district of New York, and that the same is the photograph hereinafter referred to, and that the title of such photograph is "Oscar Wilde No. 18," being the number used to designate this particular photograph, and that a copy of said photograph, marked "Exhibit A, April 14, 1882," is hereto annexed and made a part hereof.

"Second. And this plaintiff further says that the said photograph, the title of which is "Oscar Wilde No. 18," and which is the subject of this suit, is a new, useful, harmonious, characteristic, and graceful picture, and that the same is the original invention and design of this plaintiff, for the reason that it was made by this plaintiff entirely from his own original mental conception, to which he gave visible form by posing the said Oscar Wilde in front of the camera, selecting and arranging the costume, draperies, and other various accessories in said photograph, arranging the subject so as to present graceful outlines, arranging and disposing the light and shade, suggesting and evoking the desired expression, and from such disposition, arrangement, or representation, made entirely by this plaintiff, producing the picture which is the subject of this suit; and that the terms "author," "inventor," "designer," as used in this complaint and in the art of photography mean the person who so produces the photograph.

"Third. And the plaintiff further sheweth that he is the author, inventor, designer, and proprietor of the certain photograph and negative thereof, the title or description of which is "Oscar Wilde No. 18," and being such author, inventor, designer, and proprietor, and being a citizen of the United States, and desiring to obtain the copyright of the same, in conformity with the provisions of the Revised Statutes of the United States, this plaintiff, on the 14th day of January, A. D. 1882, and before the publication thereof, did deliver at the office of the Librarian of Congress, at Washington, District of Columbia, a printed copy of the title of said book or other article, to wit, of said photograph, in the following words, to wit, "Oscar Wilde, No. 18," and duly paid the fee required by law for recording the said title, to wit, the sum of fifty cents, to said Librarian of Congress, and that said Librarian of Congress did record the title of said copyright, book, or other article, to wit, said photograph, in a book kept for that purpose, as required by Section 4957 of the Revised Statutes of the United States; and the said Librarian of Congress, to wit, A. R. Spofford, Esq., did thereupon give a copy of the title or description thereof, under the seal of the Librarian of Congress, to the plaintiff as proprietor thereof, for which the said plaintiff did pay him the fee required by law therefor, to wit, fifty cents.

ANSWER OF DEFENDANT.

"The defendant herein, by Stine & Calman, its attorneys, answering the complaint herein, alleges—

"I. That the statute under which plaintiff claims herein, to wit, the Revised Statutes of the United States, Section 4952, is unconstitutional and void, in so far as it grants copyright protection to photographs and negatives thereof, and that therefore no cause of action exists herein in favor of plaintiff against defendant.

"II. That the notice of copyright inscribed by plaintiff upon said photograph, to wit, "Copyright, 1882, by N. Sarony," does not comply with the terms and requirements of section 4962 of the Revised Statutes of the United States, and chapter 301 of the Laws of 1874 of the United States, in that the name of plaintiff is not inscribed in said notice as required by law, and that there-

fore no cause of action exists herein in favor of plaintiff against defendant.

"III. Defendant denies paragraph numbered 8 of both causes of action set up in the complaint, in so far as the acts of the defendant therein alleged as charged to be a violation of plaintiff's copyright, this defendant insisting that for the reasons above stated the plaintiff has not acquired the

copyright for said photographs.

"IV. Defendant admits all of paragraph 2 in both causes of action, except that the defendant alleges that the terms "author," "inventor," "designer," "invention," "design," and "composition," as used therein, are technical terms used in art to describe the various acts therein set forth as having been performed by plaintiff. And defendant further alleges that such acts do not make plaintiff such an author, inventor, or designer, nor make such photographs such an invention, writing, or discovery as can be protected by copyright legislation under the Constitution of the United States.

"V. Defendant, further answering, admits all other allegations in the complaint, except that by reason of the above-mentioned causes defendant alleges that plaintiff has never obtained a valid copyright on the photographs herein alleged to have been copyrighted.

"Wherefore defendant asks that the complaint herein be dismissed, with costs."

DECISION.

"COXE, J.

"This is an action to recover—pursuant to Section 4965 of the Revised Statutes—for the infringement of a copyright of a photograph of Oscar Wilde.

"Two defenses are interposed:

"First. That the act securing copyright protection to photographs is unconstitutional.

Second. That the plaintiff in printing upon the photograph the initial letter of his Christian name, N., instead of the name itself, Napoleon, has not given the notice required by the statute.

"Article 1, Section 8, of the Constitution vests in Congress the power to make laws to promote the progress of science and useful arts, by securing for limited times, to authors and inventors, the exclusive right to their respective writings and discoveries.'

"Upon the authority of this Constitutional grant Congress extended, or assumed to extend, copyright protection to—

"'Any citizen . . . who shall be the author, inventor, designer, or proprietor of any . . . photograph or negative thereof.' (Sec. 4952, R. S.)

"The contention of the defendant, briefly stated, is this: That there was no constitutional warrant for this act, that a photographer is not an author, and a photograph is not a writing.

"The court should hesitate long, and be convinced beyond a reasonable doubt, before pronouncing the invalidity of an Act of Congress.

"The argument should amount almost to a demonstration. If doubt exists, the Act should be sustained. The presumption is in favor of its validity.

"This has long been the rule—a rule applicable to all tribunals, and particularly to courts sitting at nisi prius.

"Were it otherwise, endless complications would result, and a law which in one circuit was declared unconstitutional and void, might in another be enforced as valid.

"The result of a careful consideration of the learned and exhaustive briefs submitted, and of such further research and examination as time has permitted, is, that I do not feel that clear and unhesitating conviction which should possess the mind of the court in such cases.

"Many cogent reasons can be, and have been, urged in favor of the validity of the statute."

FINDINGS.

"I find as conclusions of law:

"1. That Napoleon Sarony, the plaintiff, is the author, inventor, designer, and proprietor of the photograph and negative thereof the title of which is "Oscar Wilde No. 18."

"2. That Napoleon Sarony, the plaintiff, duly complied with all the requirements of law to obtain the copyright of said photograph and negative thereof, and had and

has the sole liberty of printing, reprinting, publishing, completing, copying, executing, finishing, and vending the same for the term of twenty-eight years from January 14, 1882, pursuant to the Revised Statutes of the United States, title LX, chapter three.

"3. That the statutes of the United States authorizing copyright protection to photographs and negatives thereof are not in conflict with the Constitution of the United States."

Thus far only are our readers at present interested. We await the final decision with zeal.

OUR PICTURE.

A BRIGHTER lot of contrasts than the quartette of Mr. Sarony's pictures combined in our Mosaics this month could hardly be found, either in variety of subjects, pose, lighting, or general management. have here one of our own lovely American girls; a tragic-looking queen; and a twain below which shows how the distinguished artist has been influenced by his study of Roman art. We selected these last on purpose to show how Mr. Sarony has draped his figures so as to give some indication of their being human beings, instead of indulging in the fantastic twirls and twists of the draperies, for which he has so long been celebrated. Look, too, how deftly and how differently he has lighted his subjects, and study the effects diligently, for in each one many lessons are to be fourd.

Those who have "feeling" for this class of subjects will understand them. Ye who have not, dust off your Wilson's *Photographics*, and learn!

The four pictures are from the grand collection exhibited at Milwaukee by Mr. Seavey. As we looked upon that collection we overheard more than once "a good advertisement for Mr. Seavey's backgrounds." Do you see any such indication here? We do not think photographers understand that the exhibit was simply one of Eastern photographers' work, gotten together in order to show what a committee of one, self-appointed, could do.

It would be no compliment to Mr. Sarony's genius to mention the materials used. The

principal ingredient used in his work is Sarony. We commend these pictures to you and to your study.

The reductions and prints were made at our own rooms, and Mr. G. Gennert supplied us with his excellent paper for our purpose.

More examples in our next issue equally worthy of study.

MORE WORLDS TO CONQUER, IN PHOTOGRAPHPY.

BY C. PIAZZI SMYTH, ASTRONOMER-ROYAL FOR SCOTLAND.

HAVING been favored lately with a full collection, by that admirable example of the photographer, artist, operator, publisher, and man, Mr. Edward L. Wilson, Philadelphia, U. S., of his Egyptian series of pictures on glass for the lantern, I proceeded to wrestle with them in private, comparing them with my own series of the Great Pyramid, taken sixteen years previously. Mine had been taken not only on wet collodion, but the wettest of the wetviz., in the very silver bath itself; and this was for the sake of securing a maximum of rapidity, combined with that sensibility to variations of quality, as well as of mere light and shadow, which always made, in my humble estimation, a good wet collodion picture so much more luscious, fruity, picturesque, and truly artistic than the mere black-and-white results of the dreadfully slow dry plates of those days.

Had the comparison ended otherwise, any one would have been entitled to object that I was too interested a party to give an unbiassed judgment; but terminating as it did, after several severe examinations, both by daylight and artificial light, and with magnifiers of various kinds, in Mr. Wilson's favor, I may, perhaps, be listened to for at least some of the details, and a few general impressions also.

The fineness of the grain, then, the engraver's "color" of the shades, the delicacy of some, and power of others, of the middle tints, and the proofs of rapidity in Mr. Wilson's plates, were equal to anything accomplished with my wet; while his were all dry plates, but of that transcendant va-

riety, viz., the modern gelatino-bromoiodide plates. So behold what has now been accomplished thereby for the traveller, seeing that these plates were all prepared in America before Mr. Wilson went out to the East, and, with a few trifling exceptions, were all developed in America after he came back-leaving nothing but simply the camera exposures to be made in foreign lands. Hence, no endangering of the burning at sea of the ships he sailed in, by carrying combustible fluids like ether and alcohol in his boxes; no vainly seeking after supplies of distilled water in barbarous cities, or water of any kind in rainless regions of desert lands; nor loss of precious liquids by sand blown in, preventing glass stoppers fitting close; no difficulty either in making longest exposures in dark places, nor holding a plate ready any length of time at the tip-top of its sensitiveness for a snap-shot at some momentary phenomenon whose appearance cannot be compelled at pleasure.

In short, at this rate, has not photography risen at last to its full perfection—colors, of course, excepted—for what worker expects to see them come by the agency of nitrate of silver and pyrogallol, or any combination on that principle? There is, however, some practical improvement of possible things still to be effected, and one of Mr. Wilson's Cairo views indicates it at once, when showing us an orange tree with no perceptible difference between the fruit and the leaves, except the shape.

Can you be satisfied with such a presentation as that, my friends—all of you, at least, who have ever seen that most brilliantly contrasted thing in nature, an orange tree in full fruit and full leaf, as Professor Alexander Herschel has long since pointed out?

A learned German paper, in a late number of Mr. Wilson's journal, published in Philadelphia, discusses the particular part of the spectrum of light most powerfully represented in the new gelatino-bromide of silver plates, and considers that in some firms' make it is in the blue, and in others in the indige, or beginning of the violet; in which case, evidently, neither the orange of the fruit nor the green of the leaves,

can ever come in for a fair share in the actinic effects produced, and constituting the ultimate picture.

This is, however, an old, old story in photography, and I only bring it up once again on this occasion to append to the catalogue of prospective advantages depending on its solution, some further consequences derived from recent spectroscopic experiments of my own on rather a large scale, and carried out to a very intense degree, as thus:

Bromide of silver violet to transmitted light is the first and easiest result which bounteous nature yields to chemistry. But if that born genius of military engineering (Captain W. de W. Abney, R.E.), joined to photo-science, has been enabled, by peculiar processes of his own invention, to make silver molecules deep red under the same circumstances, why should not the whole army of photographers throughout the world prepare among themselves little silver molecules of an orange or yellow color?

Of this, at all events, they may be assured, that man, barely, if at all, sees by the spectrum's violet light. There is something in it, as it were, uncanny, and which the human eye is not qualified to apprehend, and never will. To man, a mixture of lakered and Prussian-blue makes beautiful violet; but the spectrum will have none of it. For such a mixture, if it could be kept mixed, would be less, instead of more, "refrangible" than plain blue; and no man can put any pigment into blue which will increase its "refrangibility," or the only test which the spectrum respects as to what is violet.

Moreover, the human eye has not the power to appreciate true spectrum-violet, even when set straight before it; for though a photo-plate of the violet bromide of silver order copies the lines in that part of the spectrum with any amount of sharpness of definition—they appear to the living eye only faint, broad, and hazy, focus as you will.

In fact, with a large table spectroscope for eye observation, when in the orange part of the spectrum, I can never put on sufficient prisms or magnifying power to reach the limits of what seems like perfect definition; in the violet part, on the contrary, I can never sufficiently reduce both the prism, or the "grating," and magnifying, power to come at tolerable definition, or sharpness, clearness, and force of light, whether with dark lines on a bright, continuous spectrum, or bright lines in a discontinuous or dark field, spectrum. Whence we may reasonably hope, that with orange bromide of silver, if such a thing should ever be prepared, we shall, over and above obtaining orange trees with their round fruit in brilliant contrast to their dark green leaves, we shall, I say, also have definition of all things red, yellow, citron, so marvellously improved in sharpness, that new applications in science will quickly follow.—Year-Book of Photography, 1884.

INDIVIDUALITY IN ART.*

A CONVERSATION WITH WILLIAM HART.

I VERY greatly enjoy visiting my artist friends in their studios, and engaging in conversation with them concerning their art while they continue their painting and allow me to feel that I am not an intruder. Very, very often have I wished, when it was too late, that I could recall some of those pleasant talks, in their entirety, for I have felt that they might be as interesting to others as they always are to me.

This afternoon, I dropped into William Hart's studio, in Twenty-third Street, and while Mr. Hart called several cattle into the foreground of one of his characteristic landscapes, I enjoyed watching him work and hearing him talk at the same time. From a conversation at first general and disconnected, we drifted into a talk about Individuality in Art; and as it is only a little while since I left the studio, I shall endeavor to jot down something of our conversation while I still remember it vividly. It began in this way:

"I am often asked," said Mr. Hart, "my opinion regarding the ability of some young person recently returned from a course of art studies abroad—a person, possibly, who has sent home works which seem to argue the possession of the most decided talent, but which do not sufficiently indicate to me whether the talent belongs to the student or to the master under whom he has studied. To such questions I invariably answer that we must wait for awhile and see how this apparent genius survives a few years of absence from the master. Our young friend is, at present, a mere grub in the chrysalis state, and what color the butterfly is to be is something that I feel is beyond my power to foretell.

"I do not find fault with the young painter for being influenced by his master; he must copy him to a great extent to learn from him; but after he has learned the principles that can be taught, it is time for him to set out for himself and modify and supplement what he has learned by the impressions he derives individually from Nature. It was well to imitate the master at the outset, but it does not follow that that is to be the end and aim of the learner's existence.

"In learning to draw correctly-and I consider correct drawing the most necessary basis for a thorough art education-the student must most carefully imitate that which he sees. As a student, he is not at first called upon to originate; he is expected to imitate, and to obtain proficiency as an imitator; but, after this, he must look about him to discover the spirit that is in things, and to interpret to us what Nature discloses to him. This interpretation he must give us in his own language, and we shall value it in proportion as it possesses strength, directness, truth, and beauty. To please the highest sense, it should be refined as well as vigorous-and I assure you that a picture can possess both strength and refinement, despite what some of the self-assumed critics may say. Strength does not necessarily imply brutality, boorishness, or crudity; nor does refinement of necessity indicate weakness; the two exist together in the best pictures, as in the best people.

"But an artist, all through his art life, must keep up the imitative part also. He

^{*} The hints given in this paper by one artist to another are so applicable to our profession that we make the opportunity of noticing the new publication from which we take it, also one for commending "individuality" in their work to our artistic readers.—Ed.

must exercise himself constantly in the almost merely mechanical matter of drawing, in order best to express this spirit he finds in nature. An artist is always a student."

"What would be your definition of Individuality in Art, Mr. Hart?"

"Individuality I should term the expression of the nature of the artist himself in his work. The strong, as a student, will display evidences of himself in his work, even though the same work contains much that is characteristic of his master. His work will not so literally reproduce that which his master places before him, perhaps, as will the work of a man of less talent but greater imitative ability. For that reason, persons are apt to make great mistakes in estimating the relative talents of art students. The man who draws most literally is not, by any means, necessarily the strongest man in a school, but he who succeeds in appreciating and incorporating the spirit of what he attempts to reproduce into his work, is the man who displays the most evident promise. The imitative faculty, as I have said, is an important element in the artist, but one that is of small value compared to the creative faculty. A monkey is a close imitator, but a monkey does not invent anything. An artist must be able to imitate, but he must be able to do a great deal more, and as he does more, he displays the individuality that distinguishes him from other men, and we enjoy his work because it is different from that of other men.

"Thackeray and Dickens are authors whose writings we enjoy, because they are so true to nature; but beyond that there is a great charm in the difference of the styles of the two men. We love Dickens, we love Thackeray, and yet the men are not at all alike. And it is not so much what they tell us as their inimitable way of telling it that we delight in; not so much the books as the men themselves displaying their characteristics to us through their books. And so, in art, the artist's mind, as shown through his work, is much more fascinating to us than the work itself.

¹⁰And in the matter of technique, no two men should be expected to paint alike, any more than they hould be expected to think, or write, or feel, or look alike. No two men are alike. As to the best technique, that is best for a man which enables him to express his own feeling of Nature best. A man may see Nature very broadly, or with an eye to the most minute details, and he should paint exactly as he sees. It would not do for Jean Francois Millet to try to paint like Gerome, nor may Gerome attempt to paint after the manner of Millet. Either of these men is a great master in his way, and is great because individual, and—one might say—intrinsically great in his Nature. I shall not say that one of them is greater than the other, but I may prefer one to the other, because he sees nature more nearly as I see her, or because he has a fashion of showing me those effects which I admire most in Nature in a manner that, to me, is particularly charming.

"To one who is forming an art collection, this difference—this individuality of artists —comes forward in full force; this personal nature is felt in its greatest degree. To me Corot is charming by comparison. compare him with, say, Constable. There is a masculine character in Constable's work that is positively wonderful, while in Corot's pictures we see more of the sweet, gentle, feminine influence. Corot paints with a peculiar strength, too! for, if you notice, his pictures may hang in a gallery in the midst of the most vigorously painted figure pieces, yet they have a strength-a sustaining power-that is marvellous, and shows the innate power of the master behind that dreamy, poetic feeling that is so conspicuous in his work. I greatly admire both Corot and Constable. Constable was not appreciated in his own country, but in France his works were received with the greatest favor, and caused almost a revolution in French art. You may see that Rousseau and Dupre were both very strongly influenced by Constable, though, of course, they did not imitate him. They possessed plenty of individuality, and this influence under which they painted was, under the circumstances, of a most healthy nature. It introduced elements of strength and freshness into French art which it had not possessed before, and had a positively vivifying influence. Corot and Constable differ in the

quality of their strength, and that difference is a most fascinating study."

"What is your opinion, Mr. Hart, of what are termed 'Schools' of Art? Do you believe that Art gains anything from the development of a French, a Düsseldorf, or a Munich 'School' of painting?"

"Most emphatically I do not. I consider it a pitiable condition of affairs when the existence of a 'school of painting' becomes evident. A 'school' of this kind is the bane of originality. A master will never produce the same evil effect upon a student that the 'school,' which the master represents, will extend. One is likely to gain a great deal from an artist without necessarily acquiring the academic stupidities founded upon his method; but the man who simply follows the school or method only weakens himself as he persists in it. The followers, in this country, of the old Düsseldorf School ought to serve as a 'frightful example' of the pernicious effect of following a contemporary fashion in art.

"A great deal of the academic instruction of the day teaches the student how to paint rather than how to represent. When one represents, he thinks. When one simply paints, he performs, in a great measure, a mechanical function. Conventionality is the great bane of the art schools. Insistence upon a particular way of doing a thing is most deplorable for real art. This academic conventionality continually makes itself evident in men without a particle of ability, who go abroad and send home strikingly suggestive pictures, but who, after their return to America, can only weakly imitate what they have done abroad, and paint us dismal platitudes. We often search in vain to discover a man who astonished us by his work three years ago. What has become of him? He has gone and has left nothing behind him.

"The desire to imitate is the beginning of art, but after a man lays claim to being an artist, we expect him to stop mere slavish imitation alone, and tell us what he sees. We do not want him to tell us what another man sees. Art critics should make their starting-point on the insistence of this in the beginning, for upon this everything hinges. Before men have thrown off the

shackles, so to speak, of their masters, and are able to tell how things have impressed them as individuals, they are in the position of students merely, and should not, for a moment, be dignified by the name of artists.

"We are vexed a great deal by the utter lack of knowledge on the part of many art writers in this city in this very direction. They give men credit for being our greatest artists who are nothing but copyists-and poor copyists at that! I do not intimate that these men connive with the writers, but a man knows when he copies Monticelli, for instance, that he is not doing honest work; that he is not painting his own impressions of what he sees: and I have no hesitation in characterizing such a man as a fraud in every sense of the word. When we read of such men being the true apostles of art in this country, it seems as though we must be on the descending scale. The better the monkey, the greater the artist!

"If a man is destitute of the ability to create anything, it is his misfortune; and if he experiences pleasure in making imitations of the work of other men, there can be no possible objection to his doing it; only we should not dignify his performances by calling them works of art: and when writers, from ignorance, or something worse, laud such men to the skies as great artists, it is no wonder that the papers have so little influence in such matters.

"No great artist is a copyist, and no man of real power will hold very long to the characteristics or mannerisms of his master. Van Dyck was a pupil of Rubens, but he did not paint like him; Gerome studied under Delaroche, but his pictures do not, in the least, resemble those of his master.

"When the art student who has been abroad returns to his own country, if he is a man with any strength of purpose, he will go at once to Nature, and apply in his own way the principles he has learned abroad, leaving 'method' to care for and develop itself. If he is a weak man, and clings to the characteristics of his master, he will become weaker and weaker as his impressions of the master gradually fade away from him, until, finally, we shall lose sight of him altogether.

"I tell you, individuality is the great

thing in art! No matter how humble an artist's work may be, let it show his own study and communion with Nature, and it will possess a value far above that of the most exact copy or imitation of the work of any great man.

"It is very pleasant, too, for one who is familiar with art, to walk into an exhibition gallery and be able to pick out pictures that he can feel acquainted with without the introduction given by a catalogue, though he may never have seen them before. No matter in what form a man's individuality may display itself, when you have once learned its character you always may recognize it, and no signature is necessary. And where there is this individuality, you may recognize it in the merest charcoal sketch, the rough woodcut, or the commonest reproduction. You cannot kill it, however feebly you may undertake to reproduce it. No one can mistake the individuality of Claude, Turner, Titian, Raphael, Rousseau, Diaz, or Troyon, seen through the most ordinary reproduction.

"But when I go into an exhibition and see picture after picture illustrating simply a phase of the French school, or the Munich school, or the ultra-impressionistic school, containing no individually characteristic work, I feel sad; my visit is not a pleasure to me, and my recollection afterward of this mass of dreary veri-similitude is as the memory of a very commonplace hash."

SOME MODEL BLANKS.

As we are going to turn this subject of conducting business with better prices in view all upside down, in and out, during the present year, some hints as to how to reach the hearts of the public and better prices too, may not be out of place, and so we will from time to time give somewhat of the methods of those who presper.

We begin with a snatch or two from the studio of Mr. J. Landy, a "ten-dollar a

dozen" man in Cincinnati, well-known to us all.

1. A neat, lilac colored card about $1\frac{3}{4} \times 3$, printed in blue. On the face, viz.:

APPOINTMENT

FOR SITTING.	LANDY'S GALLERY,
	208 W. Fourth St. Cincinnati.
For M	
Day	
Hour	
Style	

On the reverse side:

All pictures are to be paid for when ordered.

An extra charge is made for all re-sittings when there is any change of costume or arrangement of hair.

ANOTHER

Who will send us better ones?

This is reduced to fit our pages, the original is 32 x 8.

PARIS EXPOSITION MEDAL.	AMERICAN INSTITUTE MEDAL,	188	4NDY, Per	he style of costume
LANDY'S GALLERY -or- PHOTOGRAPHIC ART.	HIGHEST AWARDS OF EUROPE AND AMERICA. Pictures taken at this Establishment are unsurpassed for Elegance of Style and Artistic Finish. 208 W. FOURTH ST, COR. PLUM, CINCINNATI.	Cincinnati, 188 Received from M. S.	$J.\ LANDY,$ Per	An extra charge is made for all resittings when there is any change in the style of costume or arrangement of the hair.
CENTENNIAL EXHIBITION MEDAL.	VIENNA EXPOSITION MEDAL.	Recei	Number of Neg	An extra charge i
	WIL ANV	LV GVII	- 918I	

DUPLICATES OF THIS PICTURE CAN BE HAD AT ANY TIME.

^{*} From the Art Union, a new art magazine, published by The American Art Union, No. 44 E. 14th St., N. Y. Every photographer should take it, read it, and study it; it contains many admirable examples for study. Send 25 cents for sample copy.

Editor's Table.

MR. DALLMEYER DEAD .- For two or three years Mr. J. H. DALLMEYER, the highly respected and highly excellent optician of London, was afflicted with a disease of the brain, which baffled the skill of the best surgeons who tried to combat it. He was forced to give up active business and resort to milder climates, where, in the care of an attendant, it was hoped that his life would at least be prolonged and made easier if his health could not be restored. While coasting along New Zealand, on December 30th, he died suddenly, and photography suffered the loss of one of its most helpful opticians. Mr. DALL-MEYER's work is too well known to require us to expatiate upon it here. Many of us are profiting even now from the exacting calculations of his overworked brain. Mr. DALLMEYER was born in Prussia, in 1822. He was twice married; first to the daughter of the eminent optician Ross, whose apprentice he was, and lastly to the daughter of London's once-famed photographer, WILLIAMS. He had accumulated a large fortune.

MESSES. INGLIS & REID, of Rochester, have both made us personal visits of late, and are pushing their plates with real vim. See advertisement.

MR. C. H. Scofield, Utica, N. Y., offers special inducements to purchasers of his "Unique" cameras. Refer to his advertisements for particulars. The "Unique" was one of the attractions at the Milwaukee Exhibition, and, as a consequence, Mr. Scofield is busy.

AN IMMENSE CAMERA.—We think the largest camera we ever did see is one made for a New England photographer, and just finished by the AMERICAN OPTICAL COMPANY, New York. It seemed as large as some of the dark places where "green" photographers are developing their emulsion plates in a red light. Its platform extends twelve feet, and it is for plates 25 x 36. Of course, it was made immensely heavy, and only needed wheels to make it look like a regular photographic travelling establish-

ment. But then, develop it; there are no ferrotype plates as large as that. We asked what the man was going to do with it, and were answered, "catch foxes." Perhaps the respondent was correct. The camera is a fine piece of workmanship.

THE Photographic Times begins its new year with a grand ornamental cover which will attract attention and please. Inside, too, many new things will be found, making our contemporary more than ever useful. We club with it, and send the two magazines to one address for \$5.50.

THE English Year Books are both received for 1884, and are even fuller than usual of excellent photographic matter. We have a limited number of copies for sale (English print) at fifty cents each. Order early.

AN ENTERPRISING DEALER .-- We wish, particularly to refer our subscribers who intend being present at our next convention in Cincinnati, to the establishment of Messrs. P. Smith & Co., 141 and 143 West Fifth Street. It is one of the leading stock houses of the West, and the leading one in Ohio, having a branch depot at Columbus, and both doing a rushing business. Mr. D. K. Copy is the proprietor, or more properly, the senior member of the firm, and during our recent visit to Cincinnati we found him literally up to his ears in business. His popularity among the patrons of the establishment appears to be unbounded, and Mr. Copy well deserves the utmost confidence his customers can give him, as he has earned it by many years of hard labor and upright business dealings. We were glad to see the result of this in the multitude of orders which were constantly pouring in, and being as rapidly turned out by his able corps of assistants. Among other things we noticed one of the AMERICAN OPTICAL COM-PANY's largest portrait cameras, a magnificent instrument, designed for the enterprising Secretary of the Association, Mr. Weingartner. Mr. Copy is fully alive to the importance of our next

convention, and is already preparing extensively for it. The delegates will find him a genial, intelligent, and refined gentleman, who has the faculty of making a firm friend of every person he comes in contact with, and a visit to his establishment will well repay the time spent.

ONE hundred and eight pages, 9 x 12 inches, make the splendid catalogue of Messrs. ZIMMERMAN BROTHERS, St. Paul, Minn., the most extensive of all catalogues so far. It also announces their removal to their new storerooms at 371 and 373 Sibley Street. In 1871 the business of this prosperous firm "was done in a little back room by a young man and a small boy." Now an old man(?) and a young one, and a whole staff of helpers are kept busy in the immense new and double establishment just occupied.

MESSRS. ALLEN BROTHERS .- One of the most cheerful places we visited during our recent western tour, was the establishment of Messrs. ALLEN BROTHERS, 14 and 16 East Larned Street, Detroit, Mich. Their quarters are crowded, but they are doing a splendid business, and are immensely popular with their patrons. varied and extensive stock enables them to fill orders promptly, and their integrity as business men gives them a prominence which only integrity and the consideration of the interests of those who purchase of them will command. We gladly commend them to all convenient to them for the purchase of photographic necessities. The display-mats which they manufacture in their own "estayblishment" are rich, and entirely new in design.

No. 47 of The Bureau of Information has been received from Messrs. Douglass, Thompson & Co., Chicago. Gelatino-bromide paper, Spanish lace draperies, and Photographic Mosaics, for 1884, seem to be the chief articles of mention.

The Philadelphia Photographer, for January, is prefaced by one of the most remarkable portraits, by Kent, of Rochester, ever presented, even in the strong work given in the Photographer. The number is unusually rich in information to amateurs.—Philadelphia Press.

Mosaics, 1884, never had such a tremendous sale. The demand seems to be almost wild for it. Some people will be wilder to get it presently, for the pile is nearly all gone. Some of

the dealers are ordering their fourth and fifth lots. See what is said about it below:

I consider it the most valuable edition I have yet seen of the little year-book.—J. C. Patrick, Batavia, N. Y.

A LUCKY SUBSCRIBER.—Mr. ALVA PEARSALL, one of our oldest subscribers, sends us the following:

Official copy of the Judges' Report of the Fifty-second Exhibition of the American Institute, 1883.

ALVA PEARSALL, junction of Fulton and Flatbush Avenues, Brooklyn, N. Y.

The exhibition of this artist was commended in the very highest terms by your judges of last year, and Mr. ALVA PEARSALL was awarded the Medal of Taste. We would suggest the award of the same medal this year, because we have not in our power to award a greater one for his special work of life-sized bust portraits from untouched negatives.

The specimens of his work are certainly the best it has ever been our pleasure to look upon, and Mr. ALVA PEARSALL is deserving of the very highest praise for his success in this branch of the art.

We recommend that with the Medal of Taste awarded to Mr. ALVA PEARSALL, a certified copy of this report be sent, to show him that although the medal is the same, yet your judges feel that he has made great progress.

"THE MEDAL OF TASTE AWARDED,"

I hereby certify that the above is a true copy of the report on file.

John W. Chambers, Secretary.

The Medal of Taste has never been awarded to but one other photographer in the history of the American Institute.

> CHARLES WAGER HULL, General Superintendent.

We congratulate our friend of taste.

MATTERS OF THE MONTH.—The Elgin, Ill., Advocate gives Mr. S. L. Platt, of that city, a fine notice of his studio and his work. Mr. L. B. Klike, Huntingdon, Pa., suffered the loss of his studio by fire on the morning of December 10th. His loss was very severe. Mr. H. H. Warer, Rochester, N. Y., has favored us with a ticket of admission to the famous Warer Observatory.

DEATH OF AN OLD PHOTOGRAPHER.

Louisville, January 10, 1884.

THE many friends of Mr. M. STUBER will be pained to learn of his death, which occurred at his home in Louisville, January 9th.

Though comparatively a young man, being only forty-one years of age, he was one of the oldest photographers in the city. For twenty-five years he has conducted a very successful business in the same location. He was always a student and kept well up in every improvement in his business. Mr. Stuber was one of the best men I ever knew. Quiet and uniform in his temperament, always gentlemanly, he made no enemies, for he treated every one justly, and all his acquaintances were friends. He was generous to those in need, and the poor of his neighborhood have lost a faithful friend. What higher praise can be given him than this simple recital of his virtues? Would that the world was full W. D. GATCHEL. of such men!

NOTICE TO THE CRAFT.

14 and 16 East Larnard St., Detroit, January 8, 1884.

DEAR SIR: We have taken the agency for the M. A. Seed Dry Plates, and when we say they are as good as any made, and better than most others, we simply do them justice. Try them. They will super-Seed most others.

We have added to our spacious storerooms another for the display of apparatus of all kinds. Come in, view it, and buy some.

If you haven't it, send for our New Catalogue. It's not a "Daisy," but a complete Bouquet (book eh?). We carry a complete stock of everything used in photography, including Picture Frames, Mats, and Display Cards, and can fill your orders promptly.

Respectfully yours,
ALLEN BROS.

PICTURES RECEIVED.—Messrs. ALEX. FOREMAN, Grafton, W. Va., H. McNeill, Fredonia, N. Y., Manchester, Factoryville, Pa., A. O. Carpenter, Ukiah, Cal., and E. D. Ormsey, Oakland, Cal., have all favored us with admirable examples of their cabinet work, all worth much more per dozen than many photographers are getting. Mr. William McComb, Muskegon, Mich., sends us some excellent examples of his work—rich, brilliant, carefully posed and lighted, and altogether creditable. Mr. S. H. Parsons, St. Johns, Newfoundland, has favored us "with

the compliments of the season," as lovely a batch of prints as it has been our pleasure to see. Some of the marine views are exquisite, and some of the colored effects are as lovely as can be. No little thought was expended on these pictures, and the author whose name they bear deserves great credit. We congratulate him on his ability and success. Mr. Edward Cohen, of Philadelphia, favors us with a print from the negative which secured him honorable mention at the Boston Amateur Exhibition. The cat shows an almost human spirit. An excellent picture.

DISSOLUTION.

ROCHESTER, N. Y., January 1, 1884.

The partnership heretofore existing between the undersigned at the City of Rochester, under the firm name of Walker, Reid & Inglis, for the manufacture and sale of gelatine dry plates, is this day dissolved by mutual consent. The affairs of the firm will be adjusted by Messrs. James Inglis and W. H. Reid, who have purchased the entire right, title, and interest of Mr. William H. Walker, and who will continue the business under the title of Inglis & Reid. All liabilities of the old concern will be paid, and all accounts due, collected by the new proprietors.

WM. H. Walker, [L.S.]

W. H. Reid, [L.S.]

James Inglis. [L.s.]

The new firm solicit a continuance of your past esteemed favors, and guarantee entire protection in the matter of prices, and satisfaction in the quality of our goods.

Yours respectfully.

INGLIS & REID.

Mr. W. A. APGAR, Somerville, N. J., sends us some neat and curious designs for display advertisements in the gallery, which show taste and tact.

MR. F. JAY HAYNES, Fargo, Dakota, favors us with a list of his views of the Villard "Gold Spike" Excursion.

MR. H. A. HYATT, St. Louis, Mo., sends us a sheet of artotype (BENECKE) patterns of his splendid photographic furniture and accessories.

KNIGHT'S New American Mechanical Dictionary, of which we have spoken so highly and made elaborate extracts from heretofore, has

reached part four, and the handsome volume is before us. It contains two hundred and forty pages, and includes letters P (continued) to Z. The magnificent full-page and smaller cuts (almost uncountable), the specific indexes, and the carefully selected and beautifully printed matter, all tend to make this magnificent work a necessity to every genius in the country. And who will say he is not a genius? Messrs. Houghton, Mifflin & Co., Boston, are the publishers, to whom apply for a circular of particulars.

AN "AWFUL SCRATCH."—In Mr. JOHN R. CLEMONS'S excellent article in Mosaics, 1884, the word "Dutch" is used as applied to certain curious "spores," instead of "dusty." Mr. CLEMONS'S fear that some of our foreign readers may get their "Dutch" up at such an insinuation, compels us to make this important correction speedily.

THE SCOVILL MANUFACTURING COMPANY'S budget of circulars this month commends "The Non-actinic Dark-room Lantern (\$2), the Beebe Dry Plates, the Inglis Insoluble Plates, East India Grass Mats, 'Three Crown' S. & M. and N. P. A. Albumen Paper, and Nickel-plated Transparency Frames," of all of which they have new stocks and importations.

THE Photographic Times and American Photographer, bound volume for 1883, has been received from Scovill Manufacturing Company, New York. It is massive and magnificent. We club with the Times for 1884—\$5.50 for the two magazines to one address.

The business of Messrs. R. & J. Beck, 1016 Chestnut Street, Philadelphia, has been purchased by their former manager, Mr. W. H. Walmsley, who has associated Messrs. Isaac Collins (brother of Mr. A. M. Collins) and Morris Earle with him, under the firm name of W. H. Walmsley & Co., where, at the old stand, they dispense optical goods and amateur photographic requisites.

A MAGNIFICENT CHANCE.—Mr.HENRY ROCHER, the eminent Chicago artist, desires to dispose of his splendid studio in the Weber Music Hall, corner Wabash Avenue and Jackson Street, on account of declining health. No studio nor work in America stands ahead of Mr. Rocher's. His business, etc., can be purchased on fair terms, and we consider it one of the best oppor-

tunities ever offered in photography. See advertisement.

A TREMENDOUS catalogue comes this time from Messrs. H. Lieber & Co., Indianapolis, Ind. It is 7 x 10 inches in size, and contains a hundred pages, with almost countless engravings. A fine work.

Mr. J. L. CLARK, 823 Filbert St., Philadelphia, calls the attention of the trade to his unusual facilties for the reduction of photographic wastes.

THE dry plates sent us by Dr. S. O. Passavant, San Francisco, Cal., are among the best we have ever used. Some portraits sent us by the Doctor, from his plates, are magnificent.

TESTIMONIALS TO THE VALUE OF OUR PUBLICATIONS.—I must have your magazine; I would be lost without it. I have every volume since it has been published, most of them bound, and they make a very nice-looking library, with other photographic publications. I wish you a happy and prosperous New Year.—A. M. Allen, Pottsville, Pa.

Mosaics received; it is full of good things as usual. I could not do without it.—C. H. Colby, Fernandina, Florida.

I remit subscription for the year. It always gives me the greatest pleasure to send you this amount, and I can think of nothing that yields such rich returns as this investment. I wish you joy, and the abundant harvest you so richly deserve.—B. F. POPKINS, Greenfield, Mass.

After taking your valuable journal for nine years, I feel I cannot do without it.—E. B. RATA-BAUGH, Huntington, Ind.

Mosaics received to-day. It is immense, and should be in every gallery in the land. I only wish it was published oftener than once a year. I notice in the article written by myself, the printer used the word "Graphitie" in place of "graphite."—WILL A. TRIPLETT, Bluftown, O.

Kent has outdone himself this month. Glad to see the face of one of our own sex again. I began to think the women of our country were the only ones who patronized a photographic gallery. Let us have some more of the same sort. I wish the *Philadelphia Photographer* a prosperous year.—W. J. HILLMAN, Richland Centre, Wis.

Specialties.

advertising rates and terms for special ties,—Please make out your own bills and remit with your copy to insure insertion. Three lines, one insertion, \$1.50; six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. ** We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement.

BULLETIN OF L. W. Seavey, hys Studio, 8 Lafayette Place, N. Y.

Our new branch office is at 243 State Street, Chicago, Ill.

W. F. ASHE,

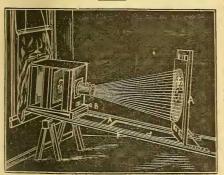
Of 106 Bleecker Street, New York, had the largest show of interior and exterior

BACKGROUNDS

AT THE

MILWAUKEE CONVENTION.

He sold them all and received many orders for more.



WILSON'S PHOTOGRAPHICS
Throws light on every conceivable photographic subject. Read advertisements.
4.00 376 Pages. \$4.00

ROCKWOOD SOLAR PRINTING CO.

17 Union Square, New York.

TIME.—It is our intention that every order received in the morning's mail (when not to be put on stretchers) shall leave this establishment the same day or the following morning. If too late for the morning work, it is sent on the second day. Having our own engine and electric light, we are not at all dependent on the weather.

GEORGE H. ROCKWOOD,
Business Manager.

G. HANMER CROUGHTON,
ARTIST TO THE TRADE.

DOUBLE FIRST-CLASS PRIZE MEDALIST.

All kinds of photographic printing. Oil, water, pastel, crayon, India-ink, and negative retoucher.
914 Chestnut Street, Philadelphia.

WAYMOUTH'S

No. 18. VIGNETTE No. 18.

The old form of No.18, Waymouth's Vignette Papers, oval, has been discarded, and a new pear-shaped style is now ready in its place. It is a beautiful piece of gradation and prints perfectly. Price \$1.25 per dozen. For sale by all dealers. See advertisement for all sizes.

No. 18. NOW READY. No. 18.

1864

1884.

M. WERNER,

PORTRAIT ARTIST,

No. 102 N. TENTH STREET, PHILADELPHIA.

Photographs finished in crayon, India ink, water colors, and pastel, in all sizes, in the very best styles, and at moderate prices.

Solar Prints and Enlargements Furnished.

FOR SALE.—A number of Seavey backgrounds and accessories, to make room for others. All in good condition. For description and price,

Address J. H. LLOYD,

44 Third St., Troy, N. Y.

EVERY photographer in want of excellent lenses, for any purpose, will best serve his interest by consulting the new illustrated price-list of Messrs. Benjamin French & Co., before purchasing.



WILSON'S PHOTOGRAPHICS

Teaches how to get rid of every monster and trouble in the practice of the art.

\$4.00 Read and consult it. \$4.00

Notice of Removal.—Mrs. Clarke, Artist, late of 561 Druid Hill Avenue, Baltimore, begs to inform her friends and the photographic profession that she has removed to 2104 North 20th St., Philadelphia, Pa., where she will be happy to receive any commission for water-color painting. Terms, etc., on application to Mrs. Clarke, or to he office of the *Philadelphia Photographer*.



WILSON'S PHOTOGRAPHICS

Holds up to view all about manipulation, photographic art, posing, lighting, etc. Nearly 4000 sold. See advertisements and testimonials.

\$4.00

\$4.00

THE PHOTOGRAPHIC MOSAICS for 1884 is ready. Like its predecessors, it contains articles of interest to all persons connected with the art of photography. The introductory article by Edward L. Wilson is teeming with useful information, and should be read to be appreciated. As there is but a limited number of copies printed, those who wish to have a useful as well as ornamental work for their studios, should avail themselves by sending in their orders as quickly as possible.

GLASS RECOATED

BY THE

PELLA DRY-PLATE COMPANY,

PELLA, IOWA.

We recoat glass from 5 x 7 up. Send for our prices, also our circular on our dry plates. Send one dollar and fifteen cents for a trial dozen of our 5 x 7 plate—wet-plate effect. We sell only to consumers.

Wanted.—Work by a good retoucher. Address

Box 545,

South Norwalk, Conn.

PORTRAITS IN CRAYON.

The new book by E. Long, on the art of making portraits in crayon on solar enlargements, covers the entire ground, and is sold for the low price of fifty cents. For sale by

EDWARD L. WILSON,
Philadelphia.

rmadeipma

WILSON'S PHOTOGRAPHICS.

It is the best book I ever got possession of. Those who want lightning or instantaneous processes had better get a copy and work with pleasure. Nothing like it; too good to be without.—Joseph Theiring, Cincinnati, O.

PROGRESS IN PHOTOGRAPHY.
\$3.00—Read Vogel's New Book.—\$3.00

S. G. NIXON,

PORTRAIT ARTIST.

No. 813 Arch Street, Philadelphia, Pa.

CRAYON AND WATER-COLOR PORTRAITS.

Solar prints and photographic enlargements furnished and finished in crayon, Indian ink, or water-colors. Photographic coloring on plain or albumenized paper and porcelain. Copies finished in Indian ink and water colors.

References and terms on application.

WILSON'S PHOTOGRAPHICS.

The first short article that I read was worth the cost of the book, and, in looking it over, find it contains an inestimable amount of valuable information which would not be found out in a lifetime of practice.—B. F. Burchand, Worthington, Minn.

A REMARKABLE OFFER.—In order to place the "Unique" within reach of photographers of limited means, it will be sold at the factory or through any stockdealer on trial for two weeks, and may be paid for in monthly installments of \$5.00, net.

C. H. Scofield,

25 & 27 Columbia St., Utica, N. Y.

Wilson's Photographics.

Fourth Edition—Now Ready. \$4.00. Post-paid. \$4.00.

METAL GUIDES

FOR

A. M. COLLINS, SON & CO.'S

No. 26 GILT BEVELED-EDGE CARDS.

The fancy-shaped mounts now so fashionable among photographers, require metal guides with which to cut the photographs. They are now kept on hand, and can be supplied in the following shapes, and at the prices mentioned:

and one had not been an entired to	Ea	ch.
Cross	\$1	05
Star	. 1	00
Palette		90
Leaf		90
Bell	-	90
Crescent		80
Egg		60
For sale by EDWARD L. WILSON,		
914 Chestnut Str	eet	,
Philadelphi	a, 1	Pa.



WILSON'S PHOTOGRAPHICS.

It leads the nose right, and presents to the eye "a perfect cyclopædia of photography."

\$4.00

\$4.00

ADDRESS CHARLES EHRMANN, Harlem, N. Y., Secretary of Association of Operative Photographers of New York City, for operators, printers, and retouchers, or in care Wm. Kurtz, 233 Broadway, N. Y.

GALLERY FOR SALE.—The finest location in Jersey City. Just fitted up. Wide entrance. Gallery on second floor. Every convenience for doing a large business. Splendid opportunity for a man with a few hundred dollars.

Address D. Rorty,

99 Montgomery Street, Jersey City, N. J.

Wanted.—Printer and toner, who can assist at retouching and operating. Address at once, stating salary expected, age, experience etc. A reliable man can have steady employment. Address W. H. Tipton,

Gettysburg, Pa.

J. ARNOLD BUNCH & CO.,

Box 424, PEORIA, ILL.,

Photographic printers, artists, and negative retouchers, beg to inform the profession that we are now able to execute all branches of work for the trade generally, and will guarantee first-class work with promptitude. Prices for contact printing, mounting on best cards, spotting and burnishing:

Per d	loz.	
Card size\$0	60 8 x 10 each\$0 2	25
First-class negative	10 10 x 12 each 3	,,,
Rivet_close negative	e retouching:	

Card size......\$0 15 | 4-4......\$0 25 | 8 x 10...........\$35

Half length, half price; full length, third price. Highly finished, bust, India-ink, watercolor, or crayon portraits, including copying, mounting, etc., with a beautiful mat:

8	x	10\$3	0.0	16 x 20 \$8 0	0
0.1	X	12 4	0.0	120×24 10 0	10
14	X	17 6	50	22 x 27 12 0	0

Satisfaction guaranteed. Every picture warranted to deliver.

Terms, five per cent. discount for cash with order. Will send C. O. D., with privilege of examination, when one-fourth the amount accompanies the order.

Time: One to three days for negative retouching, two to five days for contact printing, and five to twelve days for artistic finishing. Give plain directions in full.

DR. VOGEL'S "PROGRESS."

PREFACE TO THE AMERICAN EDITION.

No apology is needed for the issue of another work by Dr. Vogel. For nearly twenty years he has contributed largely to the knowledge of American photographers by means of his monthly correspondence in the *Philadelphia Photographer*, and three editions of his excellent *Handbook*. Therefore a warm welcome is confidently expected for this new contribution to our literature.

By his own request, I have revised and "Americanized" it as much as it would bear without damage, and have added from his correspondence such items of progress as have appeared since the issue of the German edition.

Dr. Wallace has given us an excellent translation, excreting as he has, the most consciented care throughout.

I examined the work to the eraft with a knowledge of what it contains, and trust it will proceed a website 1 anticipate.

LIGHT AND LEDGE, J. v. 1 ., 1884.



WILSON'S PHOTOGRAPHICS

Teaches every step in Photography.

\$4.00 To any Address. \$4.00

SITUATIONS WANTED.

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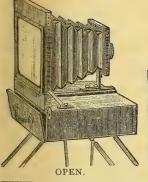
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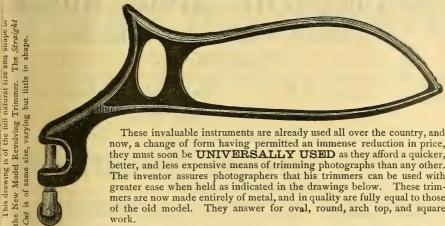
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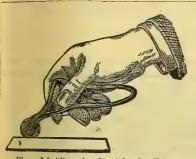
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	$x 3\frac{3}{8} 3\frac{3}{8} x 4$		$6\frac{1}{2} \times 8\frac{1}{2}$	$\begin{array}{cccc} 2\frac{1}{16} \times 3\frac{3}{4} & 2\frac{5}{16} \\ 2\frac{1}{8} \times 3\frac{3}{4} & 2\frac{5}{16} \end{array}$	$x 3\frac{7}{8}$ $2\frac{7}{8} \times 4\frac{5}{8}$	4
21	$\times 3\frac{1}{4} \qquad 3\frac{1}{2} \times 4$		7×9	$2\frac{1}{8} \times 3\frac{1}{8}$ $2\frac{3}{4}$	$x 4\frac{1}{4} 3\frac{7}{8} x 5\frac{1}{4}$	3
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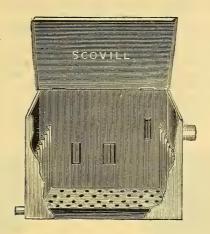
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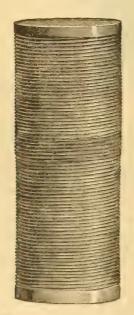
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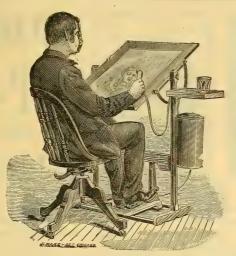
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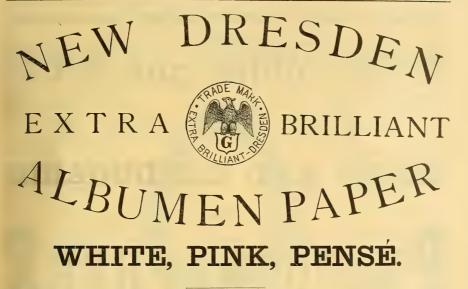
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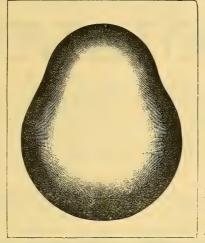
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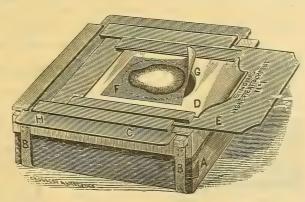
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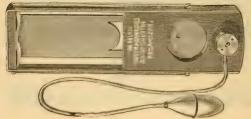
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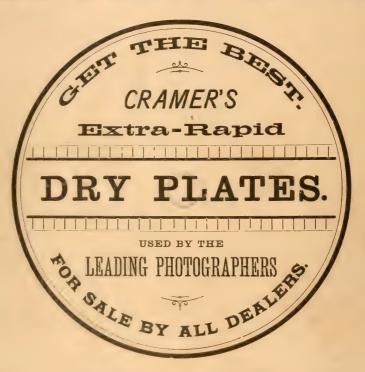
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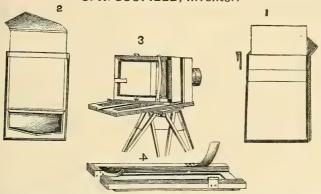
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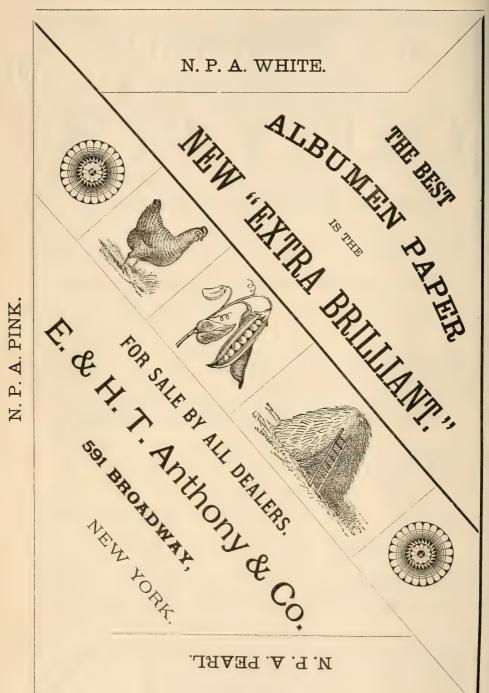
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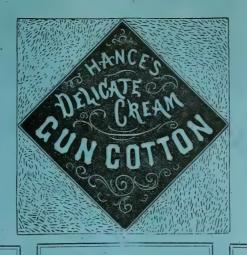
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A NUBIAN LANDSCAPE.

Philadelphia Photographer.

EDITED BY EDWARD L. WILSON.

Vol. XXI.

MARCH, 1884.

No. 243.

CINCINNATI.

JUST a word here to urge all to look further on and see what Secretary Weingartner says on the subject of the convention and exhibition at Cincinnati. It is to open July 29th, and the time to prepare is now!

"AN ARTIST IS ALWAYS A STUDENT."

BY JOHN C. PATRICK.

THE February number of your excellent journal has come to hand, as usual full of valuable matter. The two numbers already issued bid fair to make the volume for 1884 equal, if not superior, to any of its predecessors. Especially interesting to me (as I doubt not it will be to many other photographers and lovers of art) is the article you take from the Art Union, on "Individuality in Art." Some photographers may say, after reading or casually looking over it, "What has all this to do with Photography?" Much, every way, we say; for what is true in relation to individuality in art as regards the painter or sculptor, is equally applicable to the photographer, even if photography does not come under the head of the "Fine Arts."

Too many of us are mere copyists. We get into a certain rut, and seem unable to get out of it; and a glance at our show-cases does not betray any individuality whatever. On the contrary, the same positions, the

same lighting, and in many cases the same scenery and accessories, stamp our work year after year.

As Mr. Hart says: "It is very pleasant, too, for one who is familiar with art to walk into an exhibition gallery, and be able to pick out pictures that he can feel acquainted with, without the introduction given by a catalogue, though he may never have seen them before." And is not this equally true of photographic pictures and their authors? I have never had the pleasure of attending a photographers' convention, but I think there must have been at least a dozen exhibits at Milwaukee that, to anyone familiar with the work of the different exhibitors, did not need their card attached in order to be recognized as their work. Some of us, who are on the bottom round of the ladder, may look up to and envy those who are standing at the top; and perhaps we think they have been more highly favored than ourselves, or that nature has done more for them than for us. We forget that they have had to fight their way up, many of them battling against adverse circumstances at every step. Why is it that one man in a city-like Landy in Cincinnati-can command ten dollars a dozen for pictures, while others in the same city, perhaps, are glad to get three? I am not acquainted with Cincinnati, nor with Mr. Landy, but I have no doubt that every picture that leaves his studio is indelibly stamped with his individuality; and that is

the cause of his and others' success. I thank you, Mr. Editor, for that article; for such articles tend to arouse our dormant energies, infuse us with new zeal, and awake within us higher aspirations.

Mr. Hart says: "An artist is always a student." There are some old fogies in our fraternity who think they know it all. You ask them if they take a journal, and they give you to understand that they do not need to; they cannot learn anything from journals. Oh. no! they know it all, and a great deal more than those who write for journals. They are generally of that longhaired, self-important type of masculine conceit which reminds us of certain pill-sellers and sleight-of-hand performers we have seen on the streets in the "Old Country," consequential and opinionated, with no knowledge of their own ignorance. The successful photographer is always a student, and avails himself of all the means in his power for promoting and adding to his knowledge. We may consider ourselves (as I did three years ago) too poor to take a journal. I am too poor now to be without one, for I consider it (or them, for I take two) as necessary as many other accessories in my business; and what I have gleaned from the journals within the last two months has already saved me three dollars in just one thing; and I doubt not that they will save me many more before the year is out. And yet men who smoke several cigars a day talk about being "too poor to take a journal." Bosh !

Now for a wrinkle that I have not seen in print, and that, to many of your readers, may be worth more than all the preceding rambling remarks. A few days ago, a "dryplate fiend," representing the firm whose plates I use, called on me, and gave me a point that has already been of some service, as follows:

In case you want to make an instantaneous picture, or have an undertimed negative, before applying the developer, immerse the plate in one or two drachms of liquid ammonia with six ounces of water, and it will develop quickly, with the requisite intensity. The proper manipulation of this treatment, however, requires some practice I find, as you are liable to get too

much intensity, as the demonstrator did here, though he only gave half the time I should have given to the exposure of the plate.

WHAT AILS PHOTOGRAPHY?

I AM greatly pleased to see you have formed a determination to do something towards a reform in prices, since seeing the demoralizing effect of one photographer being forced down by another in the beautiful city of Detroit, as well as elsewhere, If you would but visit every hamlet of our enterprising country-enterprising in everything but photography, which is being day by day brought into disrepute all over our beloved land-I think you would be still more of the opinion that something must be done to put a little independence into each and every worker of this trying business; trying in more ways than one; our tempers are sorely tried, our nerves become unstrung, and our health more or less shattered by all these things combined.

I see that the stockdealers, at their last meeting, resolved that concert of action between themselves and the plate-makers was essential to mutual success. The factions that control money investments do so with interest; but poor labor can go a-begging for support, unless the laborer is willing to devote his whole energy to perfecting himself for any emergency that calls for action.

I see there is quite a movement toward a cooperative association for the benefit of those unfortunates in our profession who leave nothing to their relatives but their working tools. There are abundant provisions made for the poor now—so many, in fact, that they foster a "don't care for the morrow" spirit, and take away their self-reliance; which is not for their own good.

It would be better by far to try and produce a healthy tone in our profession; one by which a worker would feel encouraged to aim higher, and be sure of a recompense for his ability and labor, and thus be self-supporting. Let me quote here something in reference to political life: "There can be no ambition, no self-respect, no interest in improvement among men who know that the most faithful and successful service can-

not save them from being dropped." That is what ails photography. Each and all but the moneyed establishments fear that they will be dropped if they do not come down to their neighbor's scale of prices, and it has a a very depressing effect; and so the run is swift and sure to destruction.

The sooner the young photographer realizes that photography of itself is not a fine art, but a business that requires an artistic person to conduct it successfully, and one, too, with a great amount of business tact, the sooner he will combine the two and get a start in the world. But if he thinks himself an artist, and dreams that in time he will be appreciated, he will be sadly mistaken. It takes business push to put you to the front: examples are plenty; you can look about and see them, without any being cited.

I have a subject under consideration concerning the illustrations in the photographic journals, but I fear if I send it you may feel that I am radical—a snapper at straws, a man who has been soured by continual ill-luck, and jealous of those who have the wherewithal to produce results. But it is not so. To my mind, there are departures from the truth, and a merging of others' abilities into the sole possession of individual, who carries off the palm, instead of giving credit to the participants in his fame. Which is all right, as the world goes; but all wrong so far as truth is concerned.

And now, my good friend, and that of others, I leave you to your own reveries.

Yours truly,

M. H. ALBEE.

ART STUDY.

An address was recently delivered by Professor W. Boyd Dawkins, F.R.S., at the distribution of prizes to the students of the Brighton School of Science and Art. In the course of it he said there were two important requisites or corner-stones to the proper study of art. The first was that by which a student was enabled to see things. It was absolutely necessary, before anything could be represented properly, that it should be seen properly. He knew from his own

experience that it was one of the rarest things in the world for a man really to be able to see a thing properly. But he did not know that a man could learn to see things outside himself properly better than by trying to represent them. A man could not realize the beauty of a figure or a landscape, unless he had attempted to draw them. Until he had a knowledge of the essentials to the production, until he could pick out the salient points in the landscape or figure, he doubted much whether any man could be said to have seen the one or the other. With regard to the second corner-stone, the power of representation, he thought there was as great a dearth in that direction as there was in the power of seeing. He believed that many artists who had reached the highest rank in their profession were deficient in the capacity of adequately representing what they saw. He therefore desired to impress upon the minds of the young art students, that their first duty was to represent in their art what they actually saw, and what was true.

They must study the conditions and master the surroundings of the picture which they had to represent, and, above all things, try to be true to nature. The Professor then called attention to a number of rough sketches of animals, fishes, etc., arranged at the back of the platform, which, he said, represented the earliest traces of art known in Europe. Pointing to one sketch, that of a reindeer feeding, he said his audience would notice that the outline was wonderfully well done. Its unmistakable contour was clearly defined, and was altogether a piece of true art. When they saw such a figure they were perfectly certain that the individual who drew it represented exactly what he saw. Yet those drawings were originally produced upon fragments of antlers and of bone and little pieces of stone, while the drawing implements those early artists had at their command consisted only of rude splinters of flint. Those drawings also indicated that the young artist should not begin with the brush, painting away with indistinct outlines, but first try to represent objects by bold outlines, which, he believed, was the best way of arriving at a thorough mastery of art.

In conclusion, the Professor stated he would say a few words regarding some other things. He thought there was in this country most unfortunately an antagonism existing between handwork and headwork. In this country there were two distinct lines, if he might so put it. There was one which he might call the professional line, where it was considered a very fine and estimable thing for a man not to work with his hand, but with his head or pen. That antagonism seemed to him most unfortunate, and he thought all students should bear in mind that it was a thing which really ought not to exist. It would not exist if it were not for an intensity of vulgar prejudice. He would say that the old craftsmen of Italy, those men who were the builders of Florence and other great cities, were men who had no prejudice of that kind, and he thought that, if they really wished to do their work in the world, they must get rid of that absurd and ridiculous prejudice as quickly as possible. The work truly done was equally noble, and the man who made a table to the best of his ability was equally great, as far as his work went, with the man who painted a beautiful picture or composed a beautiful piece of music. That consideration led him to another point, and that was-What was to be the end of all this higher education? It seemed to him that if the end of it all was the production of more professional menmore doctors, more lawyers, more clergymen, more professors, and more clerks-the less they had to do with it the better. The professional classes were being overstocked, owing to that vulgar prejudice, and if education was to be of any good, it should aim at making a man better fitted to carry on his work in the world than he was be-

His opinion was, that the best education was that which would make a man better at his handicraft. If a man had the chance of pushing forward in the world let him do so, but if he tried to get out of his own line of life, let him do it at his peril. It appeared to him a most ridiculous thing that a man who knew a great deal of Latin, or geology, or chemistry, should on that account think himself entitled to be supported

by the State. The education he had in his mind, was that which was not confined to the rich, which belonged not to one class any more than the other, but to all, and which would enable all classes equally to do their work better in the position in which they found themselves.—Scientific American.

A PERFECT AND CHEAP PASTE BRUSH.

BY EMIL FREY.

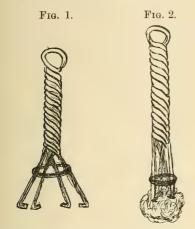
NEARLY every printer and mounter has experienced more or less vexation and annoyance resulting from the use of imperfect paste brushes; and many half-cocked blessings have been showered upon the heads of the unfortunate manufacturers.

It is certainly not conducive to good humor to find, after spending from seventyfive cents to one dollar and fifty cents for a brush, that the hair is continually coming out and lodging on the paint, or to see particles of rosin, glue, or cement, with which the hair is generally fastened in the socket of the brush, make their appearance like a small shower of sand on the back of the picture. The device which I shall proceed to describe further on, has been in use in my gallery for the last two years, and has given me such satisfaction that nothing could induce a return to the old mode of mounting. This is not a patented article, and I give it to the fraternity on its own merits, as an exchange for the many valuable dodges I have culled from your publications. Here is the modus operandi:

1st. Procure from a hardware or tin store, a cork-puller (not cork-screw), an implement used for removing, or rather extracting, corks from the inside of bottles, consisting of four pieces of wire twisted together and separating about six inches from the lower end, with a sliding ring to bring the four wires together. Each of the wires is bent at right angles, about one-eighth or one-quarter inch at the end, with points inward.

2d. Purchase from a drug store, a fine surgeon's sponge, such as is generally used by surgeons for dressing wounds, and which will be free from any grit or sand.

Should there be any impurities, remove them by careful washing; squeeze the sponge as dry as possible and insert the same in your cork-puller, leaving about one inch extending to serve as the brush; now push down the sliding ring, and the



sponge will be held firm and steady. Make your paste of the proper consistency and use but little on the brush. The entire cost of this contrivance will not exceed twenty-five or thirty cents, and will last you three times as long, work nicer, smoother, and quicker than any ordinary hair brush. The same size sponge will do equally well for any size photo., from card to fourteen by seventeen. Having finished your mounting, remove the sponge from the holder, wash well, squeeze, and lay aside for future use.

A brush of the same construction may be used with advantage in the dark-room, for removing the surplus water from dry plates after the final washing. It will absorb the water and particles of sand quicker than a camel's-hair brush. Keep the wires dry, to prevent corroding.

CORSICANA, TEXAS.

From the 24th of December to the 5th of January, that is to say, for twelve entire days, there was no sunlight in London, and it was almost impossible to obtain any photographic prints by exposing sensitive plates or paper to the light of day, and during that period of time artificial light was constantly used.

A HOME-MADE NEGATIVE-WASHER.

BY C. H. SCOFIELD.

A NEGATIVE-WASHER that you can make yourself. Take a piece of zinc and bend it in shape of an old-fashioned pig trough any length you want it, stop up one end and put the other in the sink; take a piece of lead-pipe a little shorter, and make holes about one inch apart, and hang over

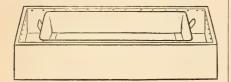


it, and connect the water with a rubber hose; you thus have the best washer that can be made. Lie the plates across the trough, and, of course, the smaller ones will go nearer the bottom and the larger ones near the top, so you can wash two or three layers of plates at one time if necessary.

WISE'S ALBUMEN-PAPER MOISTENER.

HAVING been bothered with albumen paper curling up when silvering, and many times becoming dizzy by constant breathing on back of paper, to keep it down, I determined to contrive some device to obviate this trouble; and to say I have met with success will hardly describe it. Some will say at the start: "Why, keep it in a damp place, or cellar." That is well enough; but not one photographer in a hundred has such a place at his command. To all such, and others, I freely give what to me has proved by a thorough test to be something long needed. The device, which I shall call Wise's Albumen-paper Moistener, is made and operated as follows:

Have a box made of half-inch stuff (pine), twenty-five inches long, nineteen inches wide, and six inches high inside (if measured from outside, half an inch larger every way); then have box sawed so as to make cover two inches high, leaving the main box four inches high inside. Put a handle on each end of box, and on top of cover, in centre. Have this box—cover and all—lined inside with zinc, and let the zinc extend above top of box all round, so that when the cover is on it will fight tight, and make it air-tight, or nearly so. Then have a pan made out of galvanized iron, twenty inches long, fourteen inches wide, and three inches deep, with a pice of stiff wire around the top, to make it substantial—same as any ordinary pan. Have a wire handle on



each end of this pan; also a leg under each corner, not quite an inch high. Now put water in the box, so that the pan, when it has albumen paper in it, does not float. then cut the sheets of albumen paper in half, as I only silver half a sheet at once, and trim off the ends that have no albumen on, and put from two to three dozen sheets in the pan-albumen side down, after first placing a piece of clean blotting paper on bottom of pan; put on the cover of box, and let it remain for forty-eight hours. paper is then in splendid condition for silvering. The way I do is to take off the cover, and carry the pan (paper and all) to where I want to silver; have about two thicknesses of blotting paper, which place on top of all the paper whilst you are silvering a piece; this keeps the back of the paper from drying. I leave these blotters now on the albumen paper all the time, after the paper seems to be moist enough. The blotters seem to absorb the moisture that would otherwise fall to the paper. You can regulate it now to suit yourself. When through silvering, carry the pan back and put it in the box again, and shut it up. The next time you want to silver, whether it is a day or a week, you will find the paper in splendid condition.

I give this to the fraternity, and if they find it of any benefit I shall be amply paid, and consider it only what I owe the PhilaDELPHIA PHOTOGRAPHER for the many useful bits of information I have had from its pages.

To have this moistener made will cost about four dollars and a half at any hardware store; but any photographer wishing one, and not wanting to be put to the trouble of having one made, can have one shipped to him by express, by sending me five dollars, as I am having some finished.

One thing I forgot to mention. Be sure your paper is dry before fuming. I have noticed that Hearn, and others of authority on printing, advise a room to dry the paper before fuming. Now, such a room is not within the reach of one photographer in a hundred, and to all such I would say, just try such an arrangement as I use, which is simply a large dry-goods box-which is also my fuming-box; cut a hole in the bottom of box, about the size of the top of a large tin pail; cover the hole with sheetiron; buy a one dollar oil-stove, put it under the box (but don't forget to light it); let the paper, after silvering, hang in the box for half an hour, with a gradual heat under it all the time from stove below; and you have as good a drying-room as needed, on a small scale. You can then fume your paper without having to move it. But be sure to extinguish the light before you fume. I have found that the nicest way to get blisters (and plenty of them), is to fume paper before it is thoroughly dry. I did this once in a hurry, and I shall not forget it very soon. I hardly ever have blistersnot one in six months-and I think the secret is in drying the paper; at least I shall contend it is until I learn different.

Trusting that I have not taken up too much of your valuable space, and trusting that some one may be benefited by these suggestions, as I have been with others I have found in your pages, I will close, with best wishes for the success of your journal and for the fraternity in general; also to the Cramer dry plate.

Yours fraternally, GEORGE D. WISE.

EVANSVILLE, ROCK Co., WIS

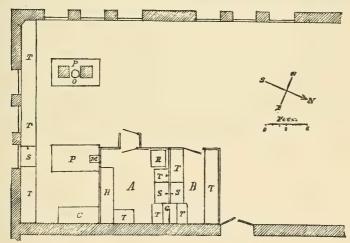
Wilson's Photographics—another edition demanded and ready! \$4.

THE NEW PHOTOGRAPHIC LAB-ORATORY AT THE MASSACHU-SETTS INSTITUTE OF TECH-NOLOGY.

SINCE the recent invention of the gelatine dry plate, photography has been advancing rapidly in the number of its applications to the arts and to the industrial and applied sciences. The Institute of Technology has not been behindhand in recognizing this fact; and in the new building, now nearly completed, a large room in the southwest corner of the basement has been appropriated to the establishment of a photographic laboratory, perhaps the first ever constructed in connection with a scientific institution, for the especial instruction of students in photographic manipulations, and for purposes of original research in this most interesting department of applied science.

The following plan shows the arrangement of a portion of the room, which measures sixty feet in length by thirty in breadth.

heliostat, microscope, spectroscope, or other instrument. A and B are the two darkrooms, entirely separated from one another by a partition, and by a wooden frame containing the gas-jet G, which is partially surrounded on three sides by sheets of Carbutt's ruby paper. S, S, S, are soapstone sinks, the two former of which are supplied with vacuum pipes for the purpose of accelerating filtration. T, T, T, represent tables, the one in the window being used for printing purposes, while the others are to support photographic apparatus and accessories. Gas will be introduced into the dark-rooms over the sinks for lighting when they are not in photographic use. It will also be supplied at the small square table in the larger dark-room for heating purposes, such as boiling emulsions. C is a case of shelves and drawers to contain books, paper, and apparatus. His a series of shelves for the storage of plates and chemicals. M is a square wooden box resting on the pier, but connecting by an aperture, measuring ten inches by twelve, with the interior of the



P, P, are two brick piers surmounted by solid stone slabs, and constructed on foundations entirely independent of the building, in order to avoid all possibility of shock or jarring. Upon one of these, brick columns are built, which pass through the ceiling into the "fourth-year" physical laboratory, which occupies the room above. The other one reaches a height of three feet, and forms a solid foundation for the support of a

larger dark-room. This is to contain a microscope for researches in photomicrography, the light coming from the heliostat through a small hole in the box. The image is thence projected upon a screen placed inside the dark-room, where the operator can examine it at his leisure. This screen is supported upon the focusing table R, which rolls upon a track, and may be placed at any distance less than three metres

(ten feet) from the aperture at M The dark-room is thus converted into a large camera, inside of which the operator stands and exposes his plate, while he may at the same time be developing another one previously taken. The greatest efficiency, convenience, and economy of time are thus combined by this arrangement.

Both dark-rooms are constantly ventilated by a system of double walls, with openings at the ceiling and floor, whilst the draught of the lamp G is utilized to increase the circulation. The light thus becomes a source of health, instead of vitiating the atmosphere, as is the case in most darkrooms. The room A is provided with double doors, so that the operator may leave the room at any time during an exposure, without the slightest fear that even the most sensitive plate could possibly be fogged by a chance ray of stray light. This arrangement, though convenient at all times, will be particularly so when working with long exposures of two or three hours in length; and, indeed, it is only by some such arrangement that these exposures become possible. Besides the aperture at M, a smaller one, six inches square, is made through the wall of the dark-room. This is intended for spectroscopic and astronomical work. Either window may be closed by a sliding shutter when the other is in use.

Between the brick columns of the pier P is placed a shelf, on which will be kept a large carboy containing a saturated solution of potassium oxalate, from which the developer bottles may constantly be replenished by means of a siphon permanently attached. We thus avoid the trouble of continually making up fresh solutions, and at the same time do not require to have the developer bottles inconveniently large. The hyposulphite of soda and sulphate of iron solutions will be similarly provided for, the latter being covered with a thin film of oil to prevent oxidation from the air.

The routine work of the department will be arranged somewhat as follows. Only those students at the Institute taking the courses in mechanical and electrical engineering, architecture, chemistry, natural history, physics, and the general courses, will receive photographic instruction. Each of them will be required to perform at least ten hours' work, divided into five days of two hours each.

Some experience has already been attained in teaching photography upon a small scale (last year this department had sixteen students); but, should the present venture prove a successful one, it is hoped it may be adopted by other colleges, and that photography may in the future come to be regarded as a necessary portion of every professional man's college education.

WILLIAM H. PICKERING.

SIMPLE PHOTO-ENLARGING APPARATUS.*

BY S. C. BEACH.

WITH the introduction of gelatine sensitive silver paper, which has the property of being extremely sensitive to light, enlarged life-sized pictures may now be readily made in a few minutes with an artificial light at night. Expensive apparatus and lenses, such as are used in solar printing upon the common albumenized sensitive paper, are dispensed with, and in their place a simple camera or magic lantern with an ordinary lamp may be employed.

Gelatine paper may be obtained already prepared, is used in a dry state, is always ready for use, and will retain its sensitiveness for any length of time, so that it affords the photographer and amateur a ready means for quickly making positive prints, at any time.

Our engravings illustrate two forms of apparatus for exposing upon the sensitive paper. The upper engraving shows a photographic dark-room separated by a partition from the exterior room.

Upon a table is placed a board on which a saddle slides back and forth. An upright frame is hinged to the upper side of the saddle, and when in use the frame is held in a vertical position by a flat metal latch as shown. At the upper end and in front of the frame, is pivoted a board twice the length of the frame, provided at one end with a large rectangular opening covered

Read before the Operative Photographers' Association of New York, February 2, 1884.

with a ground glass, the ground side being set flush with the face of the board. The board revolves edgewise in a vertical plane, and is perfectly balanced. The small engraving shows the position of the board when folded up. Arranged upon the interior side of the partition of the room in front of the focusing board is a camera box made in two parts, the front portion, with the lens attached, sliding over the rear half, which is secured light tight around a rectangular opening in the partition.

A short focus lens of the portrait combina-

adjusted. On an adjustable shelf, which can be raised or lowered, are located the ground-glass, kerosene lamp, and reflector. The centre of the lamp-flame reflector, negative, and the lens of the camera should be in one focal line.

The ground-glass in front of the lamp diffuses the light equally over the negative; an ordinary magic lantern condenser may be used in place of the ground-glass, thereby materially decreasing the time of exposure.

Our picture shows the operator in the

Fig. 1.

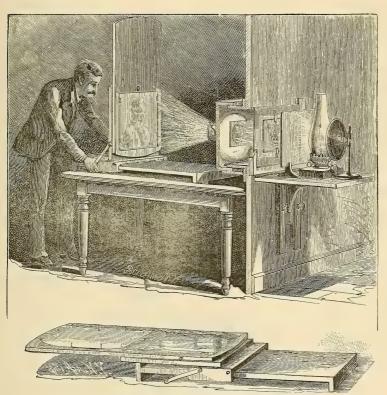


Photo-enlarging Apparatus-Obtaining the Focus.

tion type, provided with a diaphragm of an inch aperture, produces the best results.

The negative, with the film side toward the lens, is held in the slide in an inverted position, and is slid into the grooved frame upon the exterior side of the partition, as shown. This arrangement allows different sized negatives to be quickly and easily dark-room in the act of obtaining a focus; the room is supposed to be closed to all outside light, except that which comes through the lens, and the enlarged image of the negative is seen very distinctly upon the ground-glass of the focusing board. The saddle is moved back and forth until the correct focus is obtained, as, for instance

when the hair of the head or the pupil of the eye looks sharp and distinct.

The picture appears very soft, and, viewed at a little distance, shows a remarkably pleasing, crayon-like effect. The size of the enlarged image may be regulated by varying the distance between the lens and the negative. Our lower engraving illustrates the method of exposing the enlarged negative image upon the sensitive paper, showing how the operation can be carried on in one room. The amateur photographer only needs to provide a board having

rear end of the wings is located the lamp with reflector inclosed in a metal box. The arrangement is clearly shown in the small cut.

Holes are made in each side of the lantern box at the top and bottom to admit a free circulation of air, and are protected from the light by interior deflectors. A door at the rear end of the box allows the lamp to be removed. A tin cracker box can be successfully arranged to hold the lamp.

The space at the top between the rear end of the camera and the top of the lantern

Fig. 2.

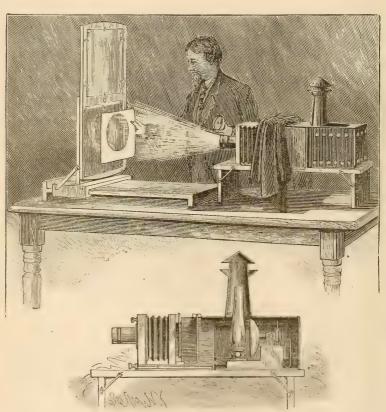


Photo-enlarging Apparatus-Making the Exposure.

vertical wings or sides which fit tightly around the sides of the back of his camera, allowing the bed of the same to slide in and out easily. A frame holding the negative is secured to the back of the camera in place of the usual ground-glass, the latter is suspended just back of the negative, and at the

box, is covered by a velvet or other black cloth, to exclude the light. As before stated, the centre of the light, negative, and lens should be in one focal line.

Having obtained the correct focus on the ground-glass on the focusing board, the operator covers the lens with a cap of ruby

glass, turns the ground glass end of the focussing board up, and fastens on the lower portion, in proper position, the sensitive sheet. When the sheet is rightly located the hook may be unlatched and the board turned flat, as shown, so that the paper may be more easily pinned to the face of the board; the latter is again raised, secured, and made ready for the exposure. vignetted picture is the most pleasing, and can be easily made, the operator needs to provide before exposure a cardboard having a notched oval aperture, which, during the exposure, is held between the lens and focussing screen, as shown. Looking upon the screen the dull-red enlarged image may now be seen, but the moment the exposure is made by removing the red cap from the lens, the picture becomes suddenly bright and brilliant. The operator then moves the vignetting card to and from the exposed sheet, thereby decreasing and enlarging the vignetting circle. In this way the beautiful soft blending so characteristic of vignetted pictures is easily produced. With a lamp like a No. 3 Leader kerosene burner, giving a flame about three and a half inches wide by an inch and a half high, and of about twenty-six candle power, an exposure of four minutes has been found sufficient. The exposure may be quickly stopped by replacing on the lens the red cap.

The exposed sheet, with the latent image impressed thereon, should now be removed to a light-tight receptacle, where it may remain ready to be developed at the convenience of the operator.

Full directions in regard to exposure, development, and fixing are sent by the manufacturers of this gelatine paper.

As the process is so simple, and the manipulation so cleanly and easy, nothing could be more pleasing, interesting, and instructive to the amateur than to amuse himself by enlarging as described.

The pictures are permanent, possess a soft, crayon-like appearance, and when finished form a beautiful adornment for one's walls.

Gelatine rapid printing paper is likely, therefore, to come into extensive use, and we predict for it a brilliant future.

THE ALBUMEN PROCESS AS AP-PLIED TO POSITIVES ON GLASS.*

BY ELLERSLIE WALLACE, JR.

BEFORE describing the practical details of manipulation of albumen plates, it will be well to make the following classification of films prepared with, (1) pure albumen, (2) collodio-albumen, the actual sensitive material, or iodo-albuminate of silver (if we may so term it), being the same in both cases.

The earlier experimenters devoted themselves almost exclusively to the pure albumen film, believing that the presence of collodion injured both tone and delicacy of detail, but as time passed by this was seen to be an error, and collodio-albumen plates were found to possess every good quality, and to be decidedly easier of preparation and development. Nevertheless, we find an article by Mr. Willis, in the British Journal Almanac, as late as the year 1875, giving full directions for the preparation of iodized albumen plates without the use of collodion, showing that the older process was still a favorite. The directions there given may be condensed as follows: A mixture of the white of egg, water, and iodide of ammonium is beaten to a froth and allowed to liquefy again, after which it is applied directly to clean glass plates. A piece of broomstick, about a foot long, is tipped at one end with a small piece of gutta-percha softened by heat; this is applied to the back of the glass until it adheres, and the iodized albumen having been poured on the face of the glass and guided out to the corners by a glass rod, the stick is rapidly twirled between the palms of the hands so as to throw off any excess and leave a thin uniform coating. The plate is now dried in a closed box, to prevent any dust from falling upon it, and is then sensitized in an aceto-nitrate of silver bath, after which it is washed, dried, and exposed. The development is conducted by pouring a saturated solution of gallic acid into a glass pan supported over a sand bath or other convenient source of heat, and immersing the exposed plate, previously adding a minute amount of nitrate of silver. The

^{*} Read before the Photographic Society of Philadelphia, February 6, 1884.

image appears in about twenty minutes, and the plate is fixed in hyposulphite of soda containing a little chloride of gold, which tones the image at the same time.

Here then, it will be seen, we have an albumeno-iodide of silver alone. The tedious development, and troublesome coating of the plates, during which, by the bye, the greatest care must be taken against dust, have probably been the chief reasons why this process was never a universally popular one. The process now to be described fulfils, I believe, all the desiderata in an albumen positive, and, so far from being troublesome to work, is remarkably easy. I may mention that it is not a dozen years since this process was sold to the professional photographers of Philadelphia at quite a high price, and was used by a number of them with great success. It was given to me shortly after by a friend. The directions are substantially as follows: Glass is cleaned, coated with any good bromo-iodized collodion, and then washed under the tap. While still wet, it is flowed with iodized albumen, and then dried. It is then sensitized in aceto-nitrate of silver, washed, dried, and exposed. The plate is developed in the hand with acid pyro and a little nitrate of sllver, using a spirit lamp to keep the developer about blood warm.

Thus, it will be seen that while identical in theory with the process as described by Willis, this one is far less laborious. coating of the plate is easily and quickly done, and seems not to require any further precaution against dust than such as any good operator would instinctively take. The development is by no means as tedious, being complete in three or four minutes, unless the plates have been under-timed, or the developer allowed to get chilled. It is also simpler and more economical than the Taupenot process, from the fact of only one silver bath being used. Still it has its drawbacks in being very insensitive when developed as described, and in the film being so nearly transparent that in the event of over-timing, solarization is almost sure to occur. Another trouble which sometimes makes itself painfully felt is blistering or slipping of the film. This, however, can be entirely gotten rid of by using no albumen substratum on the cleaned glass, and, instead, giving each plate a rub off with powdered French chalk, applying the collection directly thereafter. A number of experiments recently made to test this special point, prove it beyond doubt to my mind.

All things considered, however, the Taupenot process is the most generally useful for slide-making. Although the labor of preparing the plates is great, undoubtedly, still it has this in its favor, that the manipulations need not, indeed, ought not to be done all at one time, and I feel safe in saying that anyone, after a few trials, will be surprised to see how naturally and easily the process divides itself up (as it were) into a series of operations that may be done at any convenient time.

Every one knows the exquisite quality of the French slides—both in tone, in detail, and in brilliancy or perfect freedom from deposit. While I do not for a moment presume to place my own efforts in comparison with the work of Levy and other famed Parisian operators, I have still, in the course of some experiments very carefully made during the present winter, noticed a number of points in which my own work resembled the French so far that I feel convinced that the latter are made on Taupenot plates and toned by mercury followed after a careful washing by cyanide of silver. I have some reason to believe that the development, instead of being conducted with pyro, is done with gallic acid, by the aid of heat, and the plates developed film side down. There are decided advantages to be gained by this method. In the first place, the development of an albumen plate of any kind, but particularly of those such as the Taupenot, where albumen is the principal constituent of the compound film, must be slow when compared to other plates if the finest result is desired. This is a cardinal point in the management of albumen films, both positive and negative. In the next place, the quantity of free nitrate of silver added to the developer must be very small, particularly at the beginning of the development. The solution being thus excessively weak, heat forms a useful adjunct to the process, which would otherwise drag along

in a most tedious manner. Now, when plates are developed in the hand over a spirit lamp, the fingers get cramped when the development is so long, and the temptation to add a little additional silver is wellnigh irresistible. In the dish this, of course, would not apply, and I may here say that nothing but the impossibility of obtaining the proper kind of glass pan with ledges on the bottom to support the plate, has prevented me from trying the older fashioned method. Any article other than glass can hardly be recommended for gallic acid development, for the addition of the silver makes a fluid highly susceptible of decomposition by contact with the slightest impurity. This was alluded to as long agoas the year 1858 by Hardwich.

The blistering of the film, of which I have spoken before, is apt to cause the loss of many plates in the hands of a beginner. It depends partly upon the condition of the substratum, or rather of everything which underlies the albumen film proper, and partly upon the albumen itself. It should not be forgotten that the whites of eggs vary in glutinosity, some eggs yielding an albumen so thin that it may be filtered with ease, while that of others is a stiff, gummy mass that requires hard beating in order to become workable. Under any circumstances, however, when albumen dries it becomes a dense, horny, impenetrable pellicle of great contractility, so that it is not at all strange that the tension on the film, produced by its desiccation, should often be sufficient to blister the film, or even to draw it entirely off the glass. It will, therefore, always be well to add, say, sixty or eighty grains of white sugar, or an equivalent proportion of molasses or honey, to the iodized albumen. This modifies the horny structure of the latter, and will often be a complete cure for blistering. If the plates should be exceptionally obstinate, the application of French chalk, as before alluded to, will effect it. In comparing the process by iodized albumen with the Taupenot, it will be seen that in the former the collodionized plate is dipped into water before the iodized albumen is flowed on Evidently, any substratum previously applied would thus be dissolved away, and might as well not be there at all. Some operators have doubtless depended upon the coagulation of the substratum by the alcohol in the collodion. This is a false idea, a layer of dry albumen not being susceptible of such treatment. The attempt has indeed been made to coagulate albumenized papers by dipping them into a dish containing alcohol, and partial success obtained, but the difference between a layer of albumen on a spongy body like paper, which could absorb and retain a large quantity of spirit, and a thin layer on glass, approachable by only one of its surfaces, is manifest. Now, in the Taupenot, or any other process where the plate is dipped into the silver bath before being washed, the silver salt, one of the most efficient coagulators of albumen known, has an opportunity of penetrating to the substratum and fixing it by rendering it insoluble.

To obtain the best results with any kind of albumen plates, they should not be kept long after sensitizing in the aceto-nitrate. Three or four days in winter, or twenty-four hours in summer, would be an extreme limit. But it fortunately happens that we possess in gallic acid an agent which confers almost unlimited keeping qualities upon the film, provided that it be applied immediately after the aceto-nitrate of silver has been washed off. The washing in this case must be very thorough, any traces of silver which remain causing a red stain. The sensitiveness is decidedly lessened by the gallic acid; at least thirty per cent.

The sensitiveness of albumen plates will vary with the method of preparation, and the presence or absence of a final wash of gallic acid. As previously mentioned, pure albumen films, even without gallic acid, are very slow if developed with acid pyro; and when gallic acid is the developer the process is so lengthy that it becomes impossible to do it in the hand. But a freshly sensitized Taupenot plate is quite the reverse, particularly when alkaline pyro is used at the beginning. Under favorable circumstances it would be quite feasible to take quasi instantaneous views on these plates, i. e., street views and marine studies. This is also confirmed by M. Ferrier, the predecessor of Levy in Paris, who ranks Taupenot plates

as the very best of all known forms of dry plate, suitable for both professional and amateur protographers, and unexcelled for keeping qualities when treated with gallic acid. It will be understood that the gallic acid wash is only intended for plates that have to be kept for a long time, but when lantern slides are to be made it is better dispensed with, and the plates used as soon as possible after sensitizing, the tone of the image being finer without it. For negatives, this is not of so much importance.

A deposit is apt to form on plates that have been long kept, or when the developer is overheated, or the process too much forced. This may easily be removed by gently rubbing the film with a ball of soft, clean cotton, thoroughly wet, holding the plate under the tap. The coagulated albumen is hard enough to bear this treatment perfectly.

Those who are familiar with the published formula for the Taupenot process will notice two differences in what follows: first, the addition of white sugar to the albumen, the reason for which has already been given; and, second, the wash of fifteengrain iodide of potassium, which is applied to the film immediately before the albumen. It might very pertinently be asked, Why an aqueous wash of iodide immediately preceding the application of the albumen loaded with the same salt, was necessary? In order to answer this satisfactorily, it must be constantly borne in mind that the Taupenot film is double, i. e., an albumeno-iodide of silver superposed on a collodio-iodide. Now, in order that the alkaline iodide may enter thoroughly into the pores of the collodion film, it is necessary first to apply it in a form more capable of working its way in than the viscid, thick albumen, which always has more or less tendency to remain on the surface. Mr. Hewitt was the first to notice this fact, and to introduce the aqueous wash, and I consider it a very important improvement in the process. If the albumen were directly applied, we would have to expect more or less irregularity in the film, and perhaps partial sensitiveness to daylight, which is not the case in plates prepared by the following formula; in fact, all the manipulations up to the second sensitizing may be done in white light-a great practical advantage to the operator desirous of having clean, well-coated plates. The iodide wash completely obliterates whatever effect the white light may have had on the collodion film.

Before concluding I will give the formulæ for both processes. The iodized albumen may be the same in both, and I have found no reason to alter the formulæ which were given to me by Mr. Hewitt some years ago.

Iodized Albumen.

Dissolve and add to five ounces of white of egg, taking care that there is no yolk present. Beat to a froth, and let stand until liquefaction has taken place, then add from three hundred to four hundred grains of white sugar, and one-half drachm of ammonia. Keep it in small bottles filled to the neck and tightly corked, adding to each bottle a piece of camphor the size of a pea. If stored in a cool place, it will be good after some weeks.

For the simple albumen process, the plates are coated as before 'described, and well dried. For the Taupenot process the glass (cleaned and albumenized as usual) is coated with a rather thin and ripe collodion, dipped in the ordinary silver bath, and then washed free from silver, after which it is flowed with a fifteen-grain solution of iodide of potassium, and drained. It is then treated with two portions of iodized albumen and dried.

Aceto-nitrate Bath.

Nitrate of Silver,		400 grains.
Water,	٠	10 ounces.
Glacial Acetic Acid,		1 ounces.
Nitrie Acid, .		24 drachms.
FF33 1 3 .3 3 3 3 3 3		

This bath should not be exposed to day-light.

Development.

Pyrogallic Acid,		40	grains.
Glacial Acetic Acid,		1	ounce.
Distilled Water,		20	ounces.
Citrie Acid, .		15	grains.
(a) Nitrate of Silver,		10	grains.
Water,		1	ounce.

(b) Nitrate of Silver, . . . 20 grains. Citric Acid, 30 grains. Water, 1 ounce. Plain albumen plates are developed with the above solutions by the aid of heat. I rather prefer to use the second formula for silver solution (b), in spite of the large amount of acid. The development being lengthy, there is less risk of staining if there is a full amount of acid present. A few drops of the ten-grain solution may be added if more intensity be desired. It is well to provide each bottle with a dropping tube, so as to be able to measure the amount exactly. A single drop of either is enough to start the development.

In the case of Taupenot plates, the detail should first be brought out by a two-grain pyro solution containing one drop of a saturated solution of carbonate of ammonia to each quarter ounce, the strength being afterwards brought up with the acid pyro and silver.

Fixing and Toning Bath.

Hyposulphite of Soda, . . 6 ounces. Water, 1 pint.

Dissolve, and add four grains of chloride of gold dissolved in two ounces of water, throwing in a small lump of white chalk to neutralize acidity. All traces of developer must be washed off before laying the plate in this bath.

Toning and Intensifying.

(a) Bichloride of Mercury,	1 ounce.
Chloride of Ammonium,	1 ounce.
Water,	4 ounces

(b) Cyanide of Potassium (pure) 20 grains. Nitrate of Silver, . . . 20 grains. Water, 1 ounce.

Dissolve the silver and cyanide separately and mix, stirring until the precipitate redissolves. There must be a slight excess of cyanide in the solution.

The plate, after being fixed and washed, is flowed with the mercury (a), diluted ad lib., then, after a thorough washing, followed by the cyanide of silver (b), and again quickly washed to prevent loss of intensity, which will occur if the solution be left on too long.

Photographic Mosaics, 1884, "is worth its weight in gold," says a reader. Secure it; 50 cents, 144 pages.

SOCIETY GOSSIP.

Photographic Society of Philadelphia.—Minutes of the regular meeting held Wednesday evening, February 6, 1884. The President, Mr. Joseph W. Bates, in the Chair. Thirty-one members and eight visitors were present.

The minutes of the last regular meeting were read and approved.

Messrs. Lewis Reichner, Jr., Herman E. Bonschur, H. K. Nichols, Joseph J. Fox, John Bartlett, George N. Tatham, Jr., John Lambert, Jr., Charles Bullock, and Joseph H. Burroughs, were elected active members of the Society. Two new members were proposed for election at the next meeting.

Mr. Coates reported that preparations were being made for a lantern meeting, to show the work of members, to be held at the Franklin Institute, on Thursday evening, February 21st.

A paper on "The Albumen Process as Applied to Positives on Glass," was read by Mr. Ellerslie Wallace, Jr. (See p. 75.)

The questions in the box were as follows:

- 1. Is there any danger of leaving the intensified plate in the cyanide of silver solution too long? It was said that a reducing action would probably be the result.
- 2. Is there any accelerator which can be successfully used in case of under-exposure, save a stimulant alkali like ammonia or sal soda? Newton's iodide of mercury accelerator had been tried by a member, whose experience thus far was, that by its use exposures could be reduced one-third.

A few drops of a ten grain solution of hyposulphite of soda added to the ferrous oxalate developer was recommended, though there was danger of producing fog by its use.

3. When there is a scarcity of water, what is the best method of eliminating the hypo from the film? Can the hypo be successfully eliminated after the film is dry?

Eau de Javelle, Labarraque's solution, or acetate of lead was recommended, as was also a solution of alum. When the latter is used on prints, they must be washed about fifteen minutes to remove the alum, or they may suffer in the burnishing.

4. What is the use of the swing-back? Is is necessary for landscape work? Is a double swing-back often required?

The swing-back is needed in architectural work to keep the lines perpendicular when the camera is tilted. In landscape work it is also useful to bring the near and distant parts of the picture into sharp focus, and for this purpose can often be used to advantage in instantaneous work.

A letter was read from Mr. Titian R. Peale, acknowledging the compliment of his election as an honorary member.

The Secretary announced that a copy of the *British Journal Photographic Almanac*, for 1884, had been presented by the publishers.

The President announced to the Society with great regret, the death of Mr. J. H. Dallmeyer, the famous optician of London, which had recently occurred off the coast of New Zealand, and whose loss to optical and photographic science was greatly to be deplored.

Mr. Warmsley sent, for exhibition, one of Mr. Carbutt's latest improved developing lanterns, in which orange pot-metal cathedral glass covered with mat varnish of a reddish-orange color, was used, and with which the most sensitive plates could be safely developed.

Mr. Young had used orange glass with green cathedral glass outside, to diffuse the light. The light was quite pleasant to work by. He thought that a light whose direct rays were not safe for development, could be used where the rays fell on the plate at an angle and through the developing solution.

Mr. John R. Clemons, a visitor, showed some prints made on leatherized paper. Saxe paper and some of American make, were treated with a solution which increased its strength thirty-five to forty-five per cent. It could be applied to the paper or added to the pulp in making. The prints were of a variety of tones, and the hypo had been eliminated by the use of alum, as used by Mr. Clemons since 1873, only about fifteen minutes' washing being required.

Some lantern slides were shown by Messrs. Wood, Smith, Wallace, Barrington, Fassitt, Frank Bemont, Frank Rogers, Taylor, and others, after which the meeting adjourned.

ROBERT S. REDFIELD,

Secretary pro tem.

ROCHESTER PHOTOGRAPHIC ASSOCIATION.

—Regular meeting, Monday evening, January 14, 1884. The President, Mr J. M. Fox, in the Chair.

The minutes of the previous meeting were read and approved.

The Secretary read several communications from New York, Philadelphia, and St. Louis journals. On motion, they were placed on file.

A handsomely bound copy of the *Photographic Times* was received from the Scovill Manufacturing Company. Moved a vote of thanks of the Association for the gift. Carried.

Messrs. Pomeroy, Nelson, and Howes, Candidate Committee, made a favorable report on all applicants.

On a ballot being taken, the following new members were elected: Messrs. H. D. Marks, George Eastman, G. N. Barnard, George Monroe, R. F. Bowdich, and H. G. Durgin.

The President, in presenting the subject for discussion—Wet Plates vs. Dry Plates—said, that although his experience had been mainly with wet plates, and he was of the opinion that many operators still favored them, yet there were so many making successful work with the dry plates that the subject was interesting, and he hoped to hear the opinions of the members on both sides of the question, as many strong points could doubtless be brought forward on either side. All would doubtless concede the many conveniences of dry plates, while in favor of wet plates many good qualities could also be advanced.

Mr. Wardlaw: In the Philadelphia Photographer for January Dr. Vogel says pictures can be made just as good with dry plates as with wet plates, but never better. In a certain sense I agree with the Doctor. I have seen, as doubtless you have all seen, negatives that delineated the human face and form divine perfectly—as perfectly as could be done in black and white; but stop to consider all the points that go to make

up those extra-fine wet-plate negatives. First in importance the light; not only must we have a good light but plenty of it. Next the model; a nervous model won't do or we get an under-timed picture. I am speaking now of negatives 10 x 12 and upwards. Next comes the glass, collodion, and bath, all important in making a perfect negative. Now here the trouble with wet plates begins, and the convenience and superiority of dry plates looms up, for if we are sure our dry plates are right we can go ahead. Granting that as fine results can be made with wet as with dry plates, still I contend that it is easier for a man equally familiar with each process to make these fine results with dry plates. Take a large head, for instance, of a child or aged person; think of attempting a negative of this sort with a rectilinear lens with wet plates; it could not be done, nor would it pay to try it, while such a lens is the proper thing to use for such work; with dry plates a picture of mother or child can be made life-size direct.

Mr. Barnard: In my travels I have seen a great deal of photographers and photographs, and I am decidedly of the opinion that finer work is now being done than was formerly with wet plates. Photographers are now learning to work dry plates much more successfully than at first. Having quick plates enables them to secure many subjects they would otherwise lose, therefore they now have fewer resittings, and consequently can give more attention to securing more artistic work.

Mr. Nelson: Does the fact of people being able to have pictures taken quicker increase trade? Do amateurs hurt the trade of the professional photographer?

Mr. Bowdich: In regard to amateurs hurting the trade, I think they rather help along the photographer than otherwise.

Mr. Wardlaw: Amateurs can now see the efforts needed to make good work, and by experience find out that it is not all child's play to reach perfection in photography. When they see good work they can appreciate it.

Mr. Pomeroy: Are dry plates as quick printers as wet plates?

Mr. Nelson: I think not; they will print

much slower than wet plates. I can get off a good many more prints from wet than from dry plates.

Mr. Stone: I would much rather print from dry plates than from wet plates, provided they are of the proper quality. I am printing every day from dry-plate negatives that will print equally as quick as a wet plate, and with equally fine results; besides, I am able to make better vignettes, as the negatives are now freer from defects than when we worked the old wet-plate negatives.

Mr. Barnard: Do you think there is any benefit in a yellow negative? Do they not take much longer to print?

Mr. Stone: I prefer what is called a yellowish negative, provided they are made thin enough. Oxalate developed negatives I have usually found slow printers.

Mr. Pomeroy: If the yellow color that comes from pyro was removed, would the negative make an equally fine print?

Mr. Stone: I think not; the negative could not be made so thin and yet so crisp without the yellowish tinge.

Mr. Bacon: If the yellow color is removed would it not affect the entire plate, thereby changing the quality of the negative?

Mr. Wardlaw: To make a fine print the deepest shadows should be printed down to bronzing, or until the bronzed point is reached; the bronze should show when the print is taken from the press, but should be absent when the toning is done. To get this depth of shadow there should be a certain strength in the lights, the negative must be made so that while the shadows are printing the proper depth, the half tones are printing just enough, and the high lights are not printing at all. The high lights give brilliancy to the print. Now it does not matter what color a negative is provided it has these printing qualities-it may be ruby, yellow, or blue for that matter. I have frequently had to strengthen dry plates with iodide of mercury, which, on washing, gave a bright yellow color, but these negatives printed brilliant and quick. If they did not have the yellow color, the prints would have been flat and gray.

Mr. Barnard: This subject of color is

very much talked of throughout the country. It is a topic of general interest among photographers, and a wide difference of opinion appears to prevail in regard to it. Can it not be demonstrated?

Mr. Wardlaw: If some one will bring me a wet-plate negative that is a quick printer having good qualities, I will agree to make a pyro-developed negative on a dry plate that will print equally fine and quick.

Mr. Teller: In my opinion short development is desirable. Negatives should be timed just right in the camera. Leaving them too long in the pyro developer gives the yellowish color.

Mr. Barnard: I think the cause of most failures is from over-time, and then the negative is not properly cared for during the development.

On motion, the discussion was postponed until the next regular meeting.

The meeting then adjourned.

W. J. LEE, Secretary.

ROCHESTER PHOTOGRAPHIC ASSOCIATION.

—The regular semi-monthly meeting of this Association was held Monday evening, January 28, 1884. The meeting was largely attended.

In the absence of the President, the Vice-President, Mr. W. S. Nelson, called the meeting to order. After the minutes of the last meeting were read and approved, the Committee on Applications reported favorably on the names presented for membership.

The President, having arrived, ordered a ballot taken, which resulted in the election of the following new members: Messrs. Frederick P. Moore, Clarence Williams, William Learned, S. Miller, and W. H. Walker.

The members of the Association feel gratified at the interest already shown by the constant increase in membership. The aim will be to make the meetings as practical as possible in the manner of discussing the various subjects which may be presented from time to time.

The Question Box furnished the following queries, which, having a direct bearing on

the subject for the evening's discussion, viz., Dry Plates vs. Wet Plates, a general talk followed each question.

- 1. What is the best method for reducing strong gelatine negatives?
- 2. Is it advisable to use alum in the fixing bath for dry plates? If so, in what proportion and what effect does it have on the plates?
- 3. If only a plain hypo solution be used, how strong should it be made?

Mr. Charles H. Howes, Chairman of Question Box Committee, said he had lately been shown a plan by Mr. Wardlaw for reducing strong negatives, which, for simplicity and good results obtained, was the best by far of any formula he had used. To reduce a strong negative Mr. Wardlaw proceeded as follows: After the negative is fixed and before taking it from the hypo to wash, if it is too strong to print well, simply leave it exposed to the air, with the hypo still on the plate. In a few moments the desired reduction will have taken place; then wash the plate in the usual manner.

Mr. Wardlaw here exhibited a negative to show the result of the above method, one-half of which was quite strong, while the other half was of good printing quality. The plate had been treated in the usual manner, except that one-half was exposed to the air while the remainder was allowed to remain in the fixing bath.

Mr. Pomeroy inquired if the washing checked the reduction.

Mr. Wardlaw said it did directly, and no after-treatment was needed but to give the negative a thorough washing.

Mr. Monroe: What do you consider a thorough washing for gelatine plates?

Mr. Wardlaw: In my opinion dry plates are seldom washed too long. To eliminate the soda from a dry plate requires at least an hour's washing. A good plan which I am now using is to have a wooden box with sides and bottom grooved, made of suitable size to take the plates mostly used. Fill the box with water and let them soak. By frequently changing the water, say five or six times during an hour's wash, the hypo will be pretty thoroughly washed out. I am using a fixing bath made in the same manner, which I find works well.

Mr. Monroe said that a very fine clearing solution for dry plates is a bath composed of alum and citric acid-a handful of alum in two quarts of water and half an ounce of citric acid. This bath will remove any stain produced by the pyro developer; by using the same formula made stronger, strong negatives can be reduced. Moreover, citric acid is valuable as a restraining agent in the developer when over-exposure is feared. In case it is found that the negative develops with too much contrast, by using the pyro without the citric acid the proper detail in the shadows may be obtained. It is well in that case to have an extra dish at hand with normal developer, so that no time will be lost in transferring the plate from one dish to the other.

Mr. Howes said, regarding the second question, that he did not think that there is any special benefit to be derived from the use of alum in the fixing bath unless the plate frills; in that case use according to your own judgment what is needed to prevent it.

Mr. Shelly: Is there any injurious effect to the negative by the use of alum in the fixing bath?

Mr. Wardlaw: Negatives that are fixed in a bath containing alum in any great amount are made very hard, and I think are more difficult to wash thoroughly. I never use alum, and never have favored using it, but if I found my negatives frilled, then of course I should use it.

Question 3. Mr. Howes said that the plates will not fix as well nor yet as quickly in a bath made too strong; a weaker solution worked better, and the fixing bath may be used until it became discolored. He would not advise using after the bath grows foul. An old hypo bath will sometimes produce stains on the negative, caused by particles of other chemicals getting into it. Use the fixing bath only while it remains clear.

Mr. Monroe exhibited two negatives which he said Mr. Barnard made at his place. They were developed with his sulphite developer. One was clear, while the other showed green fog in the shadows. He said that Mr. Barnard suggested to him recently that by adding a small quantity of nitrate of silver to the developer before using, green fog would be produced.

Mr. Wardlaw: I don't think the green fog shown in this plate, which is caused by silver in the pyro developer, is identical with the genuine green fog, which is a chemical fault in some plates.

Mr. Monroe: I am not certain it is the same green fog which is caused by an overdose of ammonia in the developer, but it is at least a suggestion as to what may be the cause of it in many plates. You will note that the first plate is quite clear, while the other shows fog. I learn that the pyro developer is not generally used in England because of green fog; the opposite seems to be the rule in this country, as nine out of ten of the American photographers have ceased using the oxalate over a year since, which speaks volumes for our Yankee ingenuity.

The Secretary read the following communication from Mr. G. N. Barnard:

ROCHESTER, N. Y., January 28, 1884.

To the President and Members of the R. P. A.

Gentlemen: Absence from town will prevent my taking part in the dry-plate discussion this evening; therefore I would like to say a word or two on the question in favor of dry plates and the manner of working them. I wish to state briefly a few observations.

In discussing processes, on which many of our best photographers differ in opinion, it would be difficult for me to advance any theory without some practical demonstration or other proof that would convince anyone present for or against either wet or dry plates.

It is known to most of you that I have been actively engaged in our profession for many years, having begun it in 1842, and that I have been familiar with most of the improvements in photography from the commencement to the present time, and I now think (taking into account all the photographer of to-day can do with dry plates) that this is the greatest invention the art has yet seen.

At the last meeting it was stated that Dr. Vogel said recently that as good work could be made with dry plates as with wet, but never better. I will go a little further than the Doctor, although I regard his views

highly. I think better negatives, under most if not all conditions, can be made with dry plates, with the advantage of great rapidity over wet plates. You are all familiar with the fact that uniformity in the manufacture of dry plates in the United States can now be relied upon, and uniform plates are within the reach of all. Fine chemical results can now be obtained with care in working.

Now to obtain the best results from dry plates the manner of development must be thoroughly understood; in my opinion this is all important. Within the past few months I have visited many photographic galleries throughout the country, where dry plates of various makers were used. I found that most failures came from improper development. Quite a number of operators would make a normal developer and pour over the plate; allowing it to remain until in their opinion it was done, not taking it from the dish to examine by transmitted light until after the plate was fixed. I do not believe uniformly good results can be obtained by any such mode of working.

I hope this Society will take up the subject of development of dry plates for their deliberations at an early day. With the difficulties of the old negative bath, and the trouble incident to keeping collodion in harmony with it, you are all familiar.

Wishing you all success in working dry plates, I remain,

Fraternally yours, G. N. BARNARD.

The January number of the *Photographic Times* was thankfully acknowledged by the Association.

After several changes were made in the Constitution and By-laws, the meeting adjourned.

Association of Operative Photographers of New York.—Minutes of the meeting held February 2, 1884. President Charles Shaidnor in the chair.

The British Journal, Photographic News, PHILADELPHIA PHOTOGRAPHER, and Photographic Times were received with the thanks of the Association.

Mr. Roche introduced to the meeting Prof. Dudley, Mr. William Bell, of Philadelphia, Messrs. David Cooper and Wardlaw, of Rochester.

The Chairman of the Literary Committee introduced Mr. S. C. Beach, of the *Scientific American*, who had kindly promised to address the meeting on "Simple Photo-Enlarging Apparatus." (See page 72.)

Of the many experiments made by Mr. Beach, principally must be mentioned the enlargements. He used for all of them the bromo-gelatine emulsion paper, and with admirable success. While at a former meeting, he said, you have seen experiments made by the hydro-oxygen light, I demonstrate to you now only with the aid of an ordinary petroleum lamp. The enlargements and contact prints I make must still convince you of the immense rapidity with which bromo-gelatine papers will work. Copies I obtain with it and the scanty light at our command, I make in about a minute, while an ordinary piece of albuminized silver-paper would hardly give me a similar effect in bright sunlight in from fifteen to twenty minutes.

There are several kinds of gelatine paper in the market now, and they all are well known to me. The best and most reliable are those made by Morgan & Kidd, of London, England, Gaadsell & Steven, of Glasgow, Scotland, Mons. Hutinet, of Paris, and your esteemed member, Mr. T. C. Roche, the latter two finding representation through the Messrs. Anthony. Roche's paper undoubtedly must be given the preference over all others; its mode of preparation seems to differ from all others, as we see by the results. His modus operandi is a secret, and that he keeps it so nobody can find fault with, for it is worth keeping. At the present time, gelatine paper is used in all branches of photography, on account of its reliability and rapid action. With it, proofs can be easily made in the camera from negatives still wet, enlargements made, reproductions of all manner of things-autographs with all their intricacies, commercial papers, including the water-marks, can be rendered faithfully and correctly. It has been applied to scientific research, to meteorological and astronomical observations; the variations of the wind-vane and the mercurial column of the barometer and thermometer, all with equal success. The tourist may employ it instead of the emulsioncoated glass plate. A negative taken upon it when rendered transparent by washing will give very fine prints.

Of many experiments made, three were remarkable vignetted copies, an enlarged autograph of Capt. Abney, drawings upon heavy cardboard and printed by contact, and many others.

Mr. Beach withdrew under immense applause of the audience.

Mr. David Cooper, of the Eastman Dry Plate Company: We have been asked to produce photographic pictures with the bromo-gelatine emulsion plates-the effects and details of which were heretofore unknown to the photographer-and the most audacious speculation could hardly think it possible ever to obtain such results as those before you now. The great susceptibility of the dry plate to render faithfully the same effects as are seen upon the groundglass screen is partly owing to the quality of the plate itself, and possibly in a greater proportion to the proper management of the operator developing the negative. (Here Mr. Cooper exhibited a large number of photographs of sizes from carte-de-visite to life-size (22 x 28), made by Mr. Kent, of Rochester, Mr. Wardlaw operator; three large sizes made with 18 x 24 rapid rectilinear No. 3 stop Dallmeyer, in from twenty to forty seconds.) All the pictures exhibited were extremely fine in all details, and showed a remarkable accuracy in their technical management and artistic handling. The mode of developing these pictures will be explained to you by Mr. Wardlaw, who developed every one of those you have seen.

Mr. Wardlaw: You must not think it so very difficult to get good results with dry plates. Eastman plates bear a very great reputation, and justly so. They are invariably good, and you all have made good pictures upon them, and can make them every time if proper rules are observed. I have made some alterations in the original Eastman developer, and, as you have seen, have had some success. My mode of operating is as follows:

Pi	ro	Solution.	

Pyro, .			$\frac{1}{2}$	ounce.
Alcohol,	•		4	66

Bromide Solution.

Bromide	of Am	moni	um,	400	grains.
Water, .				4	ounces.

Ammonia Solution.

Strong Ammonia Water,	1	ounce.
Bromide of Ammonium,	60	grains.
Glycerine,	1	ounce.
Water.	6	66

Normal Developer.

Pyro Solution, .		2 d	lrachm	S
Ammonia Solution,		2	66	
Bromide Solution,		2	61	
Water		8.0	nnees	

Mr. Wardlaw says he finds it better to wait until a number of plates have been exposed before commencing to develop, and then proceed as follows:

Have three trays large enough to hold the size plates to be operated upon. Into each tray pour a sufficient quantity of the normal developer (as given above) to well cover the plate—say eight ounces for an 8 x 10 dish. To dish No. 2 add one drachm of the bromide solution; and to dish No. 3 add two drachms of the pyro solution.

We then have in-

Tray No. 1, eight ounces of normal developer.

Tray No. 2, eight ounces of normal developer, and one drachm of bromide solution.

Tray No. 3, eight ounces of normal developer, and two drachms of pyro solution.

The reason of this arrangement is, if a plate is over-exposed you can quickly and evenly check the development by slipping it from one tray to the other. In case a plate is *much* over-exposed, this is extremely important, and enables the operator to save the negative, when if he had to stop and measure it he might lose it. It also saves time, for whilst the plate is in dish No. 2, gaining intensity, another plate can be commenced in No. 1.

If sufficient strength is not gained in No. 2, remove the plate to No. 3, where the extra pyro will quickly give it the desired intensity.

If the plate is right-timed but thin when it comes out of No. 1, a short time in tray No. 2 will improve it.

If the plate shows under-exposure in tray No. 1, add one drachm of the ammonia solution to get out the detail. In this case the development should be carried to a completion in tray No. 1.

It is always better to over-expose than under-expose, as the plate almost always suffers by forcing.

One lot of developer will answer for a number of plates if developed in quick succession. If the plates are all over-exposed, the development should be commenced in tray No. 2, and finished in tray No. 3, if necessary.

In the absence of three trays, use one, and have the developer in graduates or bottles, and change as required by pouring off and on, taking care to avoid air-bubbles.

Fix in a half saturated solution of hypo and water. Wash the plate thoroughly in running water five minutes, and then soak for half an hour in two or three changes of water.

As an ocular demonstration, Mr. Wardlaw developed several plates which had previously been exposed.

A vote of thanks was tendered to Mr. Beach, Mr. Cooper, and Mr. Wardlaw, and the meeting adjourned.

CHARLES EHRMANN, Secretary.

GERMAN CORRESPONDENCE.

Ruby and Ground Glass Combined for Illumination of the Dark-room—The most Convenient Enlarging Process—Failure in Albumen Paper—Action of Ferri Prussiate of Potassa on Gelatine-cooking Emulsion.

Mr. Pritchard has recently published in the *Photographic News* his results in the employment of orange-colored glass for the illumination of the dark-room, which are not only interesting on account of their practical importance, but likewise by reason of the apparent contradiction they offer to the results obtained by photography and spectroscopy. To say that a glass medium which allows the transmission of the green rays along with the red is a better protector

from actinic rays seems at first sight like a paradox. I repeated the experiments however, and can, therefore, verify the results obtained by Mr. Pritchard. I tried photometrically ground glass, and found that it absorbed nearly twenty per cent. of the light. Orange glass intercepted the blue end of the spectrum to the middle between the line D and E, and allowed the transmission of green, orange, yellow, and red, but with an appreciable diminution in intensity. A third sheet of red glass absorbed all the colors from violet to yellow inclusive. Now it is an acknowledged fact, that even red rays have a perceptible influence upon gelatine plates. In fact, three years ago, I obtained a photograph of the red line in the spectrum of hydrogen. It is, therefore, to be presupposed that the light percolating the red glass has an effect upon gelatine plates. I exposed Monckhoven's plates in Warnerke's sensitometer for two minutes, at a distance of a metre from the flame of a fish-tail burner behind a red screen, and also a second plate behind an orange screen covered with ground glass; the results were that both plates, developed in the same manner, gave the number ten. Therefore, in practice, a ground glass in connection with an orange one may be used as a substitute for a ruby screen. Inasmuch as the chemical effect of the light from behind the orange screen in connection with the ground glass is not any greater (although it allows the transmission of the green rays) than the effect of the red, it follows that rays transmitted from it, the red, orange, yellow, as well as the green, diminished in such an appreciable amount as to have no more effect upon the sensitive surface than those transmitted through the ruby glass. In relation to chemical effect, therefore, the action is the same with both media. But the case is different when we consider the action of the light transmitted upon the comfort and health of the eyesight of the operator. A superficial comparison may be here made in relation to the greater or less ease with which print may be read under these two media: orange and ground glass have the advantage in every respect. I instituted a comparison of both by means of a photometric scale, holding, especially,

the ruby and the orange and ground glass against the light; I found that six was the highest number behind the ruby, while eight was found for the orange and ground glass. The coefficient weakening of the photometric paper was 1.7, so that the relative degree of healthfulness to vision behind the orange and ground glass was 2.89, greater than with the ruby glass. I, therefore, emphatically confirm the results obtained by Pritchard in recommending the use (observe: orange glass, not yellow) for the lantern in the dark-room.

Our Association recently discussed the question of the application of emulsion for enlargements. The high degree of sensibility to light obtainable makes it now possible to produce enlarged pictures by ordinary lamp light, by the use of Lemay's emulsion paper. In fact, Lemay, of Paris, has sent to our Society remarkable specimens of enlargements. Mr. Halms has used with advantage such emulsion for the preparation of enlargements upon canvas. He is in the habit of washing over the canvas with soda and then with citric acid, by which it acquires a suitable surface, so that the emulsion and oil color adhere very well. The enlargements may also be effected upon paper pasted upon canvas without any danger of becoming detached. Herr Graff employs the same method, only using common canvas for economy's sake. The paper is brushed over several times with gelatine, and then painted over. The texture of the canvas, which shows through upon the paper, is regarded as an advantage, inasmuch as it gives the picture more the appearance of an oil painting.

Hasse and Sohn, of Freiburg, complained that whenever they used a certain brand of albumen paper, on hanging it up to dry after silvering, the solution ran off in greasy streams or stood in single drops upon the surface, which spots subsequently showed upon the paper as measles. The silver bath had the strength of one to twelve. Herr Graff has frequently noted the defect, especially when the paper is quite fresh; it is rarer with the use of old paper. He prevents the occurrence by rubbing the paper with raw cotton before silvering. Herr Haberlandt remarked that the defect was

frequently manifest when the paper was imperfectly salted, or when the bath was too strong. Trapp and Munch always give the precaution with their paper not to make the bath stronger than one to fifteen, and to float the paper only two minutes. Herr Roloff declared that this defect in the paper had shown itself frequently in his experience, and especially with the first sheets used, but when a number of sheets had been floated and the bath in consequence weakened, the defect ceased. He further declared that the use of cotton in rubbing was of no avail; he saved such paper as began to exhibit the striæ, by laying them between sheets of blotting paper until dry.

Eder recently made the remark that the red prussiate of potash makes gelatine insoluble in the same manner as alum. If such gelatine be exposed to the light, it becomes again soluble. The case is, therefore, just the reverse of the insolation of bichromated gelatine, which by the action of light is made insoluble, not soluble. Besides, there is another salt, the perchloride of iron, which acts in a similar manner. led Poitevin to recommend it for obtaining a direct carbon positive. Interesting as the subject is for the heliographic art, yet there is the drawback to its application in the diminution in sensitiveness which is occasioned by the employment of the gelatine saturated with the salt of iron, requiring so much longer exposure. Mr. Graeter, of Switzerland, has made the observation that the process of gelatine emulsifying may be much shortened by digesting it at a higher temperature under pressure. The same results were obtained in one-quarter of an hour, under a pressure of four atmospheres, as would have been obtained with normal pressure only in an hour's time. But, unfortunately, there is a greater risk of decomposition of the gelatine with exposure to high temperature.

Yours very truly,
DR. H. W. VOGEL.
BERLIN, January 30, 1884.

Dr. Vogel's *Progress of Photography since* 1879, is the best work on dry-plate photography there is. \$3, post paid.



CONVENTION AND EXHIBITION.

WE are glad to be able to inform our readers that the Executive Committee of the P. A. of A. has had a meeting and decided some of the preliminary arrangements of the Convention to be held in Cincinnati, commencing July 29th. Mr. Leo Weingartner, Secretary of the Association, writes to us as

graving, is a large and magnificent building, finely situated, and having every facility for the exhibition of pictures, appliances, and all the apparatus pertaining to photography. The advantages offered should incite members of the fraternity to their best efforts, and as the time is not far distant, let us urge upon our readers that now is the time to prepare your exhibits and begin to save up your pocket-money; bearing in mind all the while that we want to make this the best Convention yet held in regard to the amount of good accomplished for the fraternity at large. Let the fact be impressed upon all of us, that we meet not so much for social intercourse as to compare notes and arguments as to the great future opening for photography. We are on the threshold of a new era, and it behooves us to be wide awake and keep our lamps well trimmed and burn-



follows: "The Annual Convention of the P. A. of A. will be held in Music Hall, Cincinnati, commencing on the morning of July 29th. All of the details have not been definitely settled as yet, but arrangements will be made that will allow of the very best talent of the fraternity being exhibited with practical demonstrations of methods," etc.

Mr. Weingartner also says he will send us an article at some future date giving some of the finest views in and about Cincinnati, and the best places to secure pictures from, that those who wish to may improve the opportunity to get souvenirs of the Convention.

Music Hall, as will be seen from the en-

ing, for we cannot tell what we may be called upon to accomplish in the next few years. These Conventions are just the means to disseminate knowledge of our art, and the only way we can keep abreast of the times is to put our highest endeavors into the work we bring before our brethren.

Mr. Bevan, of London, has produced a singular substance, which he has named "Lignosine." It is obtained by heating sawdust or other fibrous vegetable substances with a solution of sulphite of soda. After some time, the liquid contains a great

quantity of organic matter. Afer being acidified, albumen or gelatine is added, which gives rise to a precipitate of the substance which he calls lignosine. This product would make an excellent size for paper, and serves as a vehicle for colors and pigments. It is said that this preparation will be patented.

AMATEUR PHOTOGRAPHY AMONG THE ALPS.

(Continued from page 24.)

BY PROFESSOR CHARLES F. HIMES, PH.D.

THE proposition to add the camera and its accessories to the other necessary impedimenta of a vacation trip to Europe with a family encountered adverse advice, even from photographic friends, as well as encouragement; especially as the party already included a daughter of three and a half years and all that that involved. Without some personal knowledge of what might be anticipated, and consequent reliable data for an estimate of the stock of patience, endurance, and good nature that might be required under the inevitable annoyances so often encountered in foreign travel, perhaps the camera would have been abandoned. But the half-faded recollections of a pleasant photographic experience, some years before, off of the beaten paths in Europe, came to the rescue, reinforced by the fact that photographic outfits were comparatively cumbersome and clumsy then, when tannin plates were the perfection of dry plates, and the wet process indispensable in many cases, and seemingly never to be otherwise.

There are doubtless many who would contemplate all the demands of photography with a degree of complaisance if it was made the controlling factor, and the company especially shaped for it, but who would hesitate to interject it as an incident into a trip with widely different aims, and who might be so impressed with an apparent incompatibility of an infant and a camera as to leave one or the other behind. To such it may be said that modern photography may be made compatible with any party and any plan, and that even the infant on such a trip may be found to pay as it goes, just as well as at

home, and to contribute its peculiar part to the enjoyment of the trip in many unexpected ways, whilst it will often obtain consideration even for photographic traps not otherwise granted. Even custom-house officers seem to relent a little in the presence of these little travellers, and look with less suspicion upon the party. All in all, therefore, though it might not be advisable to borrow one for the trip, if none happen to belong to the family, it would be much lost to leave one at home, and folly to abandon or postpone a trip because of one. In the plan of a trip, and no trip should be without a plan, the status of the camera should be clearly defined. Photography should be assigned its place, should be allotted its times and places, and should be kept rigidly within bounds. In most cases it would be well to fix upon one, or perhaps upon several, photographic objective points. In this case Switzerland was selected, and more especially the neighborhood of Zermatt. The itinerary embraced other places of highest interest, rich in photographic possibilities, including Florence, Rome, Naples, with Pompeii and Vesuvius, etc., but photography was to be limited, simply because to attempt to cover the whole course of a hasty trip would be to give photography more than its proper and profitable share of time, thought, and energy, and might be in some cases not only to waste time and opportunities, but to be subjected to many annoyances, and finally perhaps to get nothing satisfactorily or thoroughly. To unlimber the camera at every castle, dog-cart, cathedral, old house, or handsome peasant girl, as there might be temptation to do, would be running photography into the extremes, would almost constitute photographic mania in the amateur, and cramp the contemplation of any object of interest within the narrow limits of photographic possibilities; would, in short, be making photography mistress instead of servant. By selecting some point, at which to spend time more leisurely, photography can be utilized to fix such views as more careful study and inspection might lead one to crave, and in this way be made to render a good account of itself. A series of pictures exhaustive of the place, or of such features as may be desired, can thus be made, which

will constitute a complete study of it. On this plan many views that would constitute pleasant souvenirs of travel might be passed, with some regret, perhaps, but with decided gain in many other direc-Desultory photography, somewhat akin to desultory travelling, might bring home odds and ends curious and interesting, but, unless well under control, they would frequently be purchased at too great a sacrifice. A study of a view for photographic purposes is by no means the most profitable or enjoyable, and as a rule an amateur might omit any view that is in the market; there will be ample room outside of those exposed for sale.

Just at this point the possibility of an excellent business speculation suggests itself to the professional photographer. are many objects of general interest untouched as yet by the professional photographer, and many of peculiar interest to the American traveller, for which the caravans of Americans that annually visit Europe would afford a remunerative demand. This results in part, of course, from the nature of photographic processes of a few years ago, and will be in some measure corrected; but, on the other hand, there is, in the first place, a lack of comprehension of what an American may find of highest interest, and, in the second place, an absence of that enterprise which avails itself of improved methods to supersede old results. In many cases old negatives, first-class in their day, are doing service where modern processes would furnish far superior ones, and, in some cases, where the peculiar features that gave them value have changed. As an example, at the gates of one of the most noted public gardens, views were exposed for sale of the beautiful beds of flowers and foliage, but which, taken at another season. gave an arrangement so entirely different that the pictures lacked much of the quality of a souvenir. There was little temptation to an American to buy, and none to a native supplied the previous season. Certainly a new negative each season would more than repay the investment. As a contrast to such cases of indifference to opportunities for business expansion, the case may be mentioned of an American who studied up a German,

settlement in America, learned the localities from which the families had emigrated and the points of interest, and made the trip to secure negatives of them upon his faith that the love of the old fatherland, still deep in the hearts of these voluntarily expatriated, and now well-to-do citizens of America, would not let him lose by the venture. Nor did he.

Carlisle, Penna.

OUR PICTURE.

WE offer our readers this month another memento of our Nile travel. The picture before us is a view in the Nubian dis-Sailing along the Nile towards the cataracts, there suddenly bursts upon the astonished vision of the traveller one of the most lovely sights imaginable; a scene fantastic as a dream, an echo of the past reflected in the present. The ruined temples and palaces, the sculptured pylons and colonnades mingling their shadows with those of the palm and the sycamore, seem to be in emulation to deck with beauty this lovely prospect. Like the last surviving child of old Father Nile, it lies calmly in his fond embrace. The glory of the past is still there, and our imagination once more peoples it with the throngs of pleasure-loving people. The scene has a peculiar interest at the present time. These old temples and altars have witnessed some of the greatest events in history, and have seen the rise and fall of many a proud monarch. Here the Ptolemies luxuriated in their pride, and the great Antony lost his domain for the seductive smile of Egypt's voluptuous queen. These walls and ruined temples once echoed to the shouts of triumphal processions and the clash of arms. Now they are silent; but it may not be long ere the thunder of artillery may wake them from their reserve and dreams of former glory.

The view before us was taken from the top of the famous temple of Isis, on the island of Philæ, and presents in the immediate foreground the ruined kiosk of this goddess, whose mysteries were worshipped over the whole of Egypt, and even found devout votaries among the most distinguished of the Greeks and Romans. Wind-

ing about this lovely gem, we see the Nile flowing in beautiful curves, and in the distance the Nubian hills. It may be of interest to know that the little steamboat which lies moored has since been lost.

The plates upon which the subject was made were six in number, every one of which turned out perfectly satisfactory, although the exposures were made in the month of January, 1882, and not developed until the following October. Having survived all the vicissitudes of travel, they revealed to us again when placed in the developing tray, a renewed impression of the beautiful scene we had beheld, and we trust that our readers may gain an adequate idea of its loveliness from the beautiful print we present them in this number.

The negatives were made upon Mr. John Carbutt's plates, and developed with the ferrous oxalate developer. The prints are upon the excellent brand of albumen paper known as the "Eagle," which is imported by Mr. Gennert, of New York, and for sale by all dealers.

THE "KEYSTONE" PLATES AT THE "HUB."

Mr. Carbutt's Demonstration in Boston.

THE professional photographers, amateurs, and others interested in dry-plate photography, assembled in full force in the studio of Mr. J. W. Black, on the evening of the 6th instant, to attend a seance of Mr. John Carbutt, of Philadelphia, who was announced to explain the method of securing the most satisfactory results with his—the "Keystone"—dry plates. Mr. Black very appropriately introduced Mr. Carbutt as a man who had performed valuable services in the interests of photography, and who had contributed very materially to the present complete success of dry plates.

Mr. Carbutt then proceeded to develop several of his "Special Portrait Plates," which had been exposed during the day in the gallery of Messrs. Ritz & Hastings—one of the very few firms in the city producing positively artistic work, and a great deal of it, at excellent prices—the results being completely satisfactory in all respects.

A difficult subject—a half-figure of a lady dressed in black silk, was handled with splendid success, the detail in the deepest shadows showing up finely, while in roundness, delicacy, and brilliancy, the negative was all that could be desired. The method of developing, too, was much admired by the deeply interested spectators on account of its extreme simplicity and the ease with which varying degrees of density could be obtained.

Mr. Carbutt then explained his manner of making window-transparencies. An 8 x 10 "A" plate, specially manufactured by Mr. Carbutt for this purpose, was placed in a deep-printing-frame over a negative of a child's portrait-taken on a "Keystone Special" during the day at the abovenamed firm of photographers-and exposed at a distance of about twenty inches to the white rays of Mr. Carbutt's "Multum in Parvo" lantern for some twenty seconds, with vignette between printing-frame and the light. The plate was then developed in a solution mixed in the proportions of oxalate solution five ounces, iron solution one ounce, bromide solution one drachm, according to the formula lately published in the Photographic Times, and which now accompanies each package of "A" plates. The image appeared in about twenty seconds, and progressed rapidly in clearness and vigor, the development being continued until in appearance it had gone to the point a silver print is allowed to reach in printing, or, in other words, when all the detail was out in the high lights and the deep shadows perfectly opaque. The plate was then removed, rinsed, and fixed in clear fresh hypo solution. After being allowed to remain for five minutes in a saturated solution of common alum, it was pronounced finished, and was eagerly inspected by the audience, who expressed themselves greatly pleased at the sight of the sparkling transparency. The enthusiasm with which it was received induced Mr. Carbutt to produce several more, from 5 x 8 negatives of Florida scenery; and as for that, he might have stood there all night making transparencies; his audience would cheerfully have stood by, watching his fascinating manipulations.

Anticipating a call for lantern slides, Mr. Carbutt then proceeded to disclose the secret of making these little gems. A 31 x 4 plate of his "A" series was placed over a selected portion of a 5 x 8 negative-a quarter-size subject not being at hand-and exposed in the same manner as the preceding transparency plates. The developing solution this time consisted of oxalate four ounces, water one ounce, iron one ounce, and bromide one drachm, from the same solutions employed in developing transparencies. The image showed up pretty much the same as in the others, and the development was stopped after the details in the high lights were distinctly visible. being subjected to the same treatment as its larger predecessors, the little one was held up for examination, and was admiringly gazed at by all, with the general remark that it was matchless, displaying all the features of a perfect lantern-slide. Of course more had to be made, and only the lateness of the hour put a stop to the work with which Mr. Carbutt was being taxed by certain over-enthusiastic amateurs.

The light in Mr. Carbutt's admirably arranged lantern extinguished, the lights were raised and a little time was spent in answering questions, which poured in from all sides. In every instance Mr. Carbutt was able to impart the desired information, and was, no doubt, agreeably impressed by the interest, enthusiasm, and intelligence manifested at this gathering. Among the audience were many of the leading artists from all parts of the State, many noted amateurs, the officers of the New England Photographic Association, and those of the Boston Society of Amateur Photographers, besides representatives of the press.

Mr. Carbutt was accompanied by his demonstrator, Mr. J. H. Weaver, of Philadelphia, a skilled photographer, who will visit the professionals of Boston and other cities to demonstrate the many excellences of the "Keystone" dry plate.

Mr. C. J. Biggs gives, in the *Photographic News* of January 6th, his experience with a *hydroquinous* developing bath. He used the formula of Mr. Parkington, which we have already made known. Nothing is

better, says he, when the plates have been well exposed; but in instantaneous photography the images almost always disappear in the hyposulphite bath. This is good to know, as it may prevent the loss of many interesting plates.

A DISCUSSION ON PRICES.

(Continued from page 51.)

II.—To be Continued until there is a Reformation.

DURING the past month we have been corresponding with some of the "good examples" spoken of in our last paper on this subject. Responses are coming in, and we shall have something important to tell next month, and don't intend to have it crowded out, either.

Please, *all* who read this, send us full scale of prices obtained by you for card and cabinet pictures, and for duplicate orders.

THE EASTMAN PLATE DEMON-STRATION IN PHILADELPHIA.

Mr. Cooper, who is demonstrator for the Eastman Dry Plate Company of Rochester, issued a special invitation to the photographers of this city (both professional and amateur), for an exhibition or social gathering to take place in the Franklin Institute Lecture Room, on Tuesday evening, February 19th. In answer to this invitation, a large number of professionals and amateurs were present. A large easel was placed in the centre of the stage for showing the samples of work made on Eastman plates. On one side, on a large blackboard, was written the following formula:

No. 1.

Sulphite	of So	da (Crysta	als),	8	ounces.
Water,					2	quarts.
Pyrogal	lie Aci	d.			2	ounces.

No. 2.

Washing	Soda	(Cr	ystals),	. 8	ounces.
Water,				. 2	quarts.

For use take of No. 1 two ounces, No. 2 two ounces, water two ounces.

To restrain, add thirty drops of a saturated solution of bromide of potassium.

Mr. Cooper uses this formula in preference to the one issued with the plates, because he thinks it much simpler, and gives good results without green fog, also giving a rich color, with crispness to the negatives. Mr. Cooper is quite a fluent speaker, and evidently was thoroughly acquainted with dry-plate manipulations, as was evidenced by the close attention that was paid to all that he had to say. He gave a number of reasons why his developer was preferable to many others. One of them was, that ammonia, no matter how well stoppered, would evaporate, and eventually lose strength, whereas washing-soda, while having fully the power that ammonia has, will remain always the same. He thought many failed with this because they did not use the clean, clear crystals of soda. Again, he said that many had green fog from using a bad sample of sulphite of soda, a good test for which is to dissolve a few crystals in water, then add a few grains of pyro, and let it remain about an hour, after which, if the solution is clear, the sample is good, but if muddy, it is of no use whatever. He claimed the greatest advantage for his developer because of its containing no bromide acting as a restrainer, but this could of course be added if required. His greatest claim for the Eastman plate was for its rapidity, which he thought was four times that of any other plate in the market. He pointed out the many advantages of dry plates over wet, and the fact that so many operators have entirely discarded the bath and collodion. His talk became, in fact, quite a lecture, and was listened to by an appreciative audience, composed, as it was, of some of Philadelphia's most prominent photographers, both amateur and professional. During the lecture he exhibited on the easel a number of frames containing specimens of work made on Eastman plates, by Mr. J. H. Kent, of Rochester. They certainly were gems, and spoke volumes for the plates as well as the operator who used them, and made a truly magnificent display of artistic work. One frame containing some heads of children nearly life-size, was especially commented upon, as the pictures showed very little if any work on the negatives with the brush and pencil. These

large negatives were made with a Dallmeyer Rapid Rectilinear Lens, considerably stopped down, in three and four seconds. The fine display of cabinets attracted attention next, as much for their artistic posing and lighting as for their chemical qualities. These were made with a Dallmeyer 3 A lens. All the display-frames were lighted up with a concentrated oxyhydrogen light, managed by Prof. Holman, of the Franklin Institute.

After Mr. Cooper had concluded his talk he requested the audience to get up some discussions on dry-plate working, and called on his old friend, Mr. William Bell, of this city for many points, which started quite a number of others, and soon many of the vexatious questions were propounded, and ably answered, in most cases, by Mr. Cooper, who seemed in his element. He answered the question as to the best method of reducing the density of a gelatine plate, by giving an accidental discovery made by Mr. Wardlaw, the tester of all of Eastman's plates. He used a rack placed in a tank of hypo, for fixing plates after development, and as he took out a number of plates, leaving a few in the soda, he was called away, and on returning found that the parts of the plates that had been exposed to the air, while still impregnated with hypo, were considerably weaker than the parts remaining covered with the solution. He therefore attributed the reduction in density to the action of the air and hypo. Consequently a strong negative can be reduced by dipping into a hypo bath, and allowing to remain a short time, and again dipping, and a second or third time exposing to the air before washing. This, of course, applies especially to Eastman's plates. Mr. Cooper suggested that a great many thin negatives were caused by the development being stopped before the shadows were sufficiently developed or covered. He said that a plate should never be judged by transmitted light, but only by looking down on the surface, as a negative may look dense enough by transmitted light, yet be insufficiently developed, and produce a thin, sickly negative. The development should proceed until the shadows are quite covered, but, should the 'development proceed too

rapidly, and the shadows cover too quickly, then the bromide solution should be added, and slowly gone on with. Of course, judgment and experience would be necessary to produce the best results, and no one should expect to go hap-hazard about the exposure and development, and get good results. In speaking of the proper light for development, Mr. Cooper thought that if the color was right, then any quantity could safely be used, yet he advised the use of just sufficient ruby or very deep orange light to make everything visible that was needed in development of very sensitive plates. Mr. Bell asked if Mr. Cooper did not consider the orange post-office paper a safe light to work by. Mr. Cooper said, in answer, that it should be of double thickness, when it would be safe. The question was asked, What caused yellow stains in the negatives? To which he answered, that if a plate is lifted from the fixing-bath when not entirely fixed, and examined in white light, it would produce the yellow stains. At the same time, if a plate not fixed is taken into white light the same would take place, but all over the plate evenly, so that no mark was left, excepting a slight yellowness. He thought a negative should never be printed from until varnished, as the effect of silvered paper coming in contact with the gelatine was sure to produce stains some time. Mr. Bell stated that if the negative was put into a bath of chrome alum, two grains strong to the ounce, and left from two to ten minutes, it could be dried with heat, and would bear any ordinary amount of printing without risk of staining. To this Mr. Cooper recommended that all intensifying, etc., must first be done, or the film would be so hardened that it would scarcely again take up any moisture, and he thought no satisfactory application of an intensifier could be made after a plate had been in the chrome alum solution. To this Mr. Rau stated that he had intensified a great number of negatives with niercury, followed by cyanide of silver, that had previously been soaked in alum solution. The audience were now requested to step up and examine the pictures closely, which they did, taking special pleasure in a large (18 x 22) negative of an old man,

which was as clean and fine as a small plate. Mr. Cooper was ready and anxious to demonstrate the Eastman plate to any who desired it, and would always be ready to give, cheerfully, all he could to help any one working in the dark. The meeting certainly taught many who were present, some things they did not know before, and partook more of the character of a photographic society's meeting.

DOTS OF THE DAY.

Mr. Audra has been making experiments for increasing the sensitiveness of gelatino-bromide of silver, and for that purpose added starch to the gelatino-bromide emulsion. This addition did not have the desired result; but prints made on plates prepared with this mixture had the appearance of those made on ground glass. Some positives of this kind were shown by Mr. Audra at the January meeting of the French Photographic Society. It is possible that this process might be utilized for making diapositives for the stereoscope.

COMPLAINTS have been made of the decreasing brilliancy observed in lamps burning American coal-oil. From recent chemical investigations it appears that the quality of these mineral oils is very variable. Some of them carbonize the wick at the end of a day, and the next day it is necessary to change the lamp or the wick to obtain the former brightness. Dr. Divers, an English chemist, Professor in the college of Tokio, Japan, and his learned pupil, Mr. Makamura, have just proved that the bad qualities of coal-oil which cause the lampwick to blacken, are owing to the water which is present in the oil, or which is formed by the decomposition of certain carburets of hydrogen (impurities) during combustion. By removing the wick and thoroughly drying it in an oven, the water is driven off, and it acts like a new wick when replaced in the lamp.

A NEW photographic apparatus was recently shown to the members of the Glasgow Association by Mr. Mactear. It is called the "Grimokistoscope," and seems to have been invented for the use of caricaturists. In shape it resembles a stereoscope, and the lenses have a rotary motion, producing a distortion of the image. A portrait seen in this instrument becomes a veritable caricature, which no doubt could be reproduced photographically by means of a suitable arrangement of the camera. It is, perhaps, with an appliance of this kind that are obtained the hideous portraits of celebrated or notorious persons which appear in certain London papers.

WHEN there is no sunshine, and it is not possible to make a suitable print on albu-

menized paper, it is good to know that with gelatino-bromized paper it is possible to work with a gas-jet, or even with a simple candle. A little more care in exposing and developing, and we have an image more durable than that on albumen. In exposing, the distance from the luminous source depends on the density of the negative. The greater the contrast, the further the negative should be from the source of light. It is only very soft and harmonious negatives that can be very quickly printed by placing them near the luminous source.

Editor's Table.

PICTURES RECEIVED .- From Mr. CHARLES E., EMERY, Silver Cliff, Col. A remarkable pictures with a peculiar appearance in the sky resembling a falling meteor. We are having it investigated by some of our astronomical friends. From Mr. E. B. Core, Lincoln, Neb., a number of technically excellent pictures of a young lady, apparently an actress, in a number of positions, the pictures ranging from cabinets to 7 x 10. From Mr. WALTER N. MANCHESTER, Factoryville, Pa., a series of cabinet portraits of old and young people, being some of his best work. Mr. MAN-CHESTER also sends us a curious picture of a photographer's kit dressed up in clothes, and shows how, in time, a man gets to look like his work. From Mr. H. M. SEDGWICK, Zanesville, Ohio, a number of cabinets of various subjects, and excellent quality, together with some business hints which we shall publish in our next issue. From Mr. W. H. HAZER, Johnstown, N. Y., a 5 x 8 picture of an intelligent looking horse in harness. An example of his dry-plate work. Mr. J. LANDY, Cincinnati, O., sends us some fearful "flood" photographs, and a catalogue. Terrible!

THE ART UNION.—The February issue of this admirable magazine, from which we quoted last month, is received, and is an excellent number. We wish all our readers would subscribe for and study The Art Union. Not only does it contain a great deal of matter of service to them, but the etchings and engravings are capital studies for all portrait and landscape photographers.

It will be seen by an advertisement in proper place that we have arranged to supply *The Art Union* to our readers. Do not neglect such an opportunity for study and improvement.

Mr. C. H. Tonndorff's "Stamp Portraits" are going to make business for many. Send for sample and write for particulars to 1423 Chestnut Street, St. Louis. More next month.

Photographic Association of Canada.—This is the name of a new body recently formed with headquarters at Toronto. The following are its officers: Mr. R. D. Bayley, President; Mr. J. N. Edy, Vice-President; Mr. E. Poole (St. Catharine's), Secretary. A great deal of enthusiasm characterized the first meeting, and we shall look for some useful information from the other side of the St. Lawrence.

THE PACIFIC COAST AMATEUR PHOTOGRAPHIC ASSOCIATION has been organized with promising prospects. Its officers are Mr. Wm. C. Gibbs, President; Mr. W. B. Tyler, Vice-President; Mr. W. H. Lowden, Secretary. Headquarters at San Francisco. Recently a meeting was held to listen to a lecture by Dr. S. C. Passavant on carbon printing. Suitable appliances were provided the lecturer, who demonstrated his subject in a practical manner to his audience. Prints made during the day were developed before those present, and transferred to both glass and paper, the whole process being exemplified

and explained, and numerous questions answered. After the lecture there was a general informal discussion of the subject of the evening and kindred topics. The members exhibited some very creditable work of their own, and there were also shown some beautiful samples of Woodburytyes, artotypes, and phototypes, collected by different ones. Mr. TASHEIRA showed a new drop-shutter, having a pneumatic trigger, which was examined with great interest and closely criticised, as every amateur thinks he has the best drop-shutter extant. Comparisons and exchanges of prints were made, and several new members were elected. After the members and guests had discussed the collation provided by the Refreshment Committee, the large Oakland delegation having to catch the eleven o'clock boat, the Association adjourned. Dr. PASSAVANT, it will be remembered, is the manufacturer of the excellent dry plates to which we have called attention, and which this month are advertised.

ITEMS OF NEWS .- Mons. MAURICE GALLET, Paris representative of the RIVES PAPER MANU-FACTORY, called upon us a few days ago. His first visit to America. Mr. EDWARD MUYBRIDGE has been interesting large audiences in this city with his lectures on "The Romance and Realities of Animal Locomotion." He has arranged with the University of Pennsylvania for the further prosecution of his useful studies in the same line. Mr. T. F. INDERMILL, St. Joseph, Mo., favored us with a call recently. He speaks favorably of business in his section of the country. Mrs. E. N. Lockwood's article in Mosaics, 1884, has excited a good deal of attention, and in answer to several inquiries for her address, we give it below-Ripon, Wis. "What shall we do about prices?" is her topic. Messrs. Douglass, Thompson & Co., Chicago, issue a special circular to their patrons, giving a list of the contents of Mosaics, 1884. Mosaics (144 pages for fifty cents) sells constantly, and the great pile is nearly all gone. The World's Exposition and Cotton Centennial will be held in New Orleans, from December, 1884, to May 31, 1885. Photography comes under class 807, Mr. E. A. BURKE, Director General. SEAVEY'S picture at the Water-Color Exhibition, in New York, was snapped up at \$100.

An Engraving Diamond.—Those who have for so long wanted something by which their negatives could be easily numbered, will hail with delight the introduction of an instrument which is just what they want. It is an engrav-

ing diamond, mounted so that numbers or names may be written or engraved with it upon glass. Next month we shall describe it fully and illustrate its use. Meanwhile read the advertisement.

PRESS NOTICES OF PHOTOGRAPHERS.—We are in receipt of newspapers giving fine press notices of their studios and their work from Messrs. Stauffer, of Asbury Park, N. J., C. E. Orr, of Sandwich, Ill., and J. B. Leisenring, Fort Dodge, Iowa. We rejoice with our friends, and wish we had space to print all the good words said about them.

WE regret to learn of the death of the beloved wife of Mr. THEODORE LILIENTHAL, New Orleans, La.

Mrs. J. H. FITZGIBBON deserves great credit for her energy and perseverance, and her magazine honors her. She is good enough to send it to us without charge.

MESSRS. A. M. COLLINS, Son & Co. have just issued a splendid new price-list of card stock, free to buyers. See the "Red-Letter" page.

An admirable quality of gelatine has been sent to us by Messrs. F. Drescher & Co., Obemdorf, Schweinfurt, Germany. We rarely see anything more clear and pure. Emulsion workers will do well to read their advertisement this month.

THE offer of his studio and business made by Mr. Henry Rocher, Chicago, is a rare chance. He has one of the best appointed places in the world, and no one makes better work.

A SUMMER SCHOOL OF PHOTOGRAPHY, under the care of Prof. CHARLES F. HIMES, Ph.D. of Dickinson College, Carlisle, Pa., will be organized at Mountain Lake Assembly this year. Particulars in our next.

The "Air-Brush" continues to win favor on all sides. It may be that our remarks upon it last month were a little vague. It is useful only with liquid pigments, and is not of service with pastel crayon, water-colors, etc. The advertisement is very plain.

THE Philadelphia Photographic Club, composed of amateurs, is a newly organized association. It will support a dark-room for the use of the members. Its officers and proceedings will be reported in our next.

Specialties.

ADVERTISING RATES AND TERMS FOR SPECIALTIES.—Please make out your own bills and remit with your copy to insure insertion. Three lines, one insertion, \$1.50; six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. ** We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement.

BULLETIN OF

L. W. Seavey, hys Studio, 8 Lafayette Place, N. Y.

Our new branch office is at 243 State Street, Chicago, Ill.

"THE SILVER PLAQUE."

Just out. Eclipses all our former productions. Prices, 5×8 , \$1.00; 8×10 , \$1.50; 11×14 , \$3.00.

W. F. ASHE,

Of 106 Bleecker Street, New York, had the largest show of interior and exterior

BACKGROUNDS

AT THE

MILWAUKEE CONVENTION.

He sold them all and received many orders for more.

Notice of Removal.—Mrs. Clarke, Artist, late of 561 Druid Hill Avenue, Baltimore, begs to inform her friends and the photographic profession that she has removed to 2104 North 20th St., Philadelphia, Pa., where she will be happy to receive any commission for water-color painting. Terms, etc., on application to Mrs. Clarke, or to the office of the Philadelphia Photographer.

Wanted for Cash.—A photographic studio in a live town. Must be well arranged in every way for doing first-class work. Address, with particulars,

O. N. Ranney,

Waltham, Mass.

ROCKWOOD SOLAR PRINTING CO.

17 Union Square, New York.

TIME.—It is our intention that every order received in the morning's mail (when not to be put on stretchers) shall leave this establishment the same day or the following morning. If too late for the morning work, it is sent on the second day. Having our own engine and electric light, we are not at all dependent on the weather.

GEORGE H. ROCKWOOD,

Business Manager.

G. HANMER CROUGHTON,
ARTIST TO THE TRADE.

Double First-Class Prize Medalist.

All kinds of photographic printing. Oil, water, pastel, crayon, India-ink, and negative retoucher. 914 Chestnut Street, Philadelphia.

WAYMOUTH'S

No. 18. VIGNETTE No. 18.

The old form of No. 18, Waymouth's Vignette Papers, oval, has been discarded, and a new pear-shaped style is now ready in its place. It is a beautiful piece of gradation and prints perfectly. Price \$1.25 per dozen. For sale by all dealers. See advertisement for all sizes.

No. 18. NOW READY. No. 18.

1864

1884.

M. WERNER,

PORTRAIT ARTIST,

No. 102 N. TENTH STREET, PHILADELPHIA.

Photographs finished in crayon, India ink, water colors, and pastel, in all sizes, in the very best styles, and at moderate prices.

Solar Prints and Enlargements Furnished.

EVERY photographer in want of excellent lenses, for any purpose, will best serve his interest by consulting the new illustrated price-list of Messrs. Benjamin French & Co., before purchasing.

BARGAINS!

One five-inch portrait lens, tolerably rapid, and will cut a 14 x 17 plate, only..\$75 00

Terms C. O. D. on four days' trial; money returned if not satisfactory. An excellent instrument with central stops.

One Roettger direct printing solar camera, twelve-inch condenser, complete, with object lens, only......\$75 00 One 5 x 8 acme stereo box, nearly new, 15 00

All goods warranted as represented.

BACHRACH & BRO..

Cor. Eutaw and Lexington Streets, Baltimore, Md.

WANTED TO BUY .- A well-paying business, or engage in a good gallery, with or without the privilege of purchasing, by a first-class workman in every branch of photography. Young man, with the very best of reference as to character. Speaks English and German fluently.

> Address C. Schneiker, 388 Queen Street, West, Toronto, Canada.

WANTED .- By April 1st, a strictly first-class operator in wet and dry plates, who also understands printing and toning. Address MISS E. F. BRAINERD,

Wooster, Ohio.

ADDRESS CHARLES EHRMANN, Harlem, N. Y., Secretary of Association of Operative Photographers of New York City, for operators, printers, and retouchers, or in care WM. KURTZ, 233 Broadway, N. Y.



WILSON'S PHOTOGRAPHICS

Holds up to view all about manipulation, photographic art, posing, lighting, etc. Nearly 4000 sold. See advertisements and testimonials.

\$4.00

\$4.00

THE PHOTOGRAPHIC MOSAICS for 1884 is ready. Like its predecessors, it contains articles of interest to all persons connected with the art of photography. The introductory article by Edward L. Wilson is teeming with useful information, and should be read to be appreciated. As there is but a limited number of copies printed, those who wish to have a useful as well as ornamental work for their studios, should avail themselves by sending in their orders as quickly as possible.

GLASS RECOATED

BY THE

PELLA DRY-PLATE COMPANY,

PELLA, IOWA.

We recoat glass from 5 x 7 up. Send for our prices, also our circular on our dry plates. Send one dollar and fifteen cents for a trial dozen of our 5 x 7 plate-wet-plate effect. We sell only to consume s.

WANTED .- Work by a good retoucher. Address Box 545,

South Norwalk, Conn.

PORTRAITS IN CRAYON.

The new book by E. Long, on the art of making portraits in crayon on solar enlargements, covers the entire ground, and is sold for the low price of fifty cents. For sale by

EDWARD L. WILSON,

Philadelphia.

PROGRESS IN PHOTOGRAPHY. \$3.00-Read Vogel's New Book.-\$3.00

S. G. NIXON,

PORTRAIT ARTIST.

No. 813 Arch Street, Philadelphia, Pa.

CRAYON AND WATER-COLOR PORTRAITS.

Solar prints and photographic enlargements furnished and finished in crayon, Indian ink, or water-colors. Photographic coloring on plain or albumenized paper and porcelain. Copies finished in Indian ink and water colors.

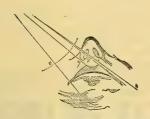
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WILSON'S PHOTOGRAPHICS.

The first short article that I read was worth the cost of the book, and, in looking it over, find it contains an inestimable amount of valuable information which would not be found out in a lifetime of practice .- B. F. BURCHAND, Worthington, Minn.

A REMARKABLE OFFER .- In order to place the "Unique" within reach of photographers of limited means, it will be sold at the factory or through any stockdealer on trial for two weeks, and may be paid for in monthly installments of \$5.00, net. C. H. SCOFIELD,

25 & 27 Columbia St., Utica, N. Y.



WILSON'S PHOTOGRAPHICS.

It leads the nose right, and presents to the eye "a perfect cyclopædia of photography." 84.00

\$4.00

METAL GUIDES

FOR

A. M. COLLINS, SON & CO.'S

No. 26 GILT BEVELED-EDGE CARDS.

The fancy-shaped mounts now so fashionable among photographers, require metal guides with which to cut the photographs. They are now kept on hand, and can be supplied in the following shapes, and at the prices mentioned:

	Each.
Cross	\$1 05
Star	1 00
Palette	90
Leaf	90
Bell	90
Crescent	80
Egg	60
For sale by EDWARD L. WILSO	on,
914 Chestnut	Street,

Wilson's Photographics. Fourth Edition—Now Ready. \$4.00. Post-paid. \$4.00.

Philadelphia, Pa.

SITUATIONS WANTED.

No charge for advertisements under this head; limited to four lines. Inserted once only, unless by request.

As operator, or to run a gallery on shares. Has had eight years' experience in leading galleries. Samples furnished. Strictly temperate. Those meaning business, please address Photographer, care Edward L. Wilson, 912 and 914 Chestnut Street, Philadelphia.

Permanently as operator, or printer and retoucher. Understands wet and dry, and indoor and outdoor work. Address A. Mariot, 16 Minetta Lane, New York.

By a good printer and toner. Address Photographer, 383 Bunker Hill Street, Charlestown, Mass.

By a young man as printer and toner. Has had three years' experience. Reference given. Address William Sinclair, 97 Elm Street, Buffalo, N. Y.

As first-class retoucher and crayon artist. Address W. L. Haskell, 21 University Place, New York City.

A permanent situation, by a lady retoucher. Samples sent, if desired. Address Miss Cora Blake, Elmira, N. Y.

By a first-class operator, capable of taking charge of gallery. Does not retouch. Best of references. Address N. W. Sequerre, care of Hardy & Van Arnam, Troy, N. Y.

As retoucher and reception-room lady. Reasonable wages first year. Address Ada E. Starbird, care Mrs. E. N. Lockwood, Ripon, Wis.

As printer and toner, in a first-class gallery. Good reference if needed. Prefer a large city. Address J. F. Lynch, 323 Atwells Avenue, Providence, R. I.

As general assistant in a strictly first-class gallery. Can do everything but retouch. Address E. L. Williams, 179 Duffield Street, Brooklyn, N. Y.

By a first-class negative retoucher. Only good galleries need answer. First-class reference furnished. Address T. F., care of C. Foster, 219 Hanover Street, Boston, Mass.

By a first-class assistant operator, who is also a first-class collodion transfer enlarger, and well up in all other branches of the business. Late of Messrs. A. & G. Taylor, 814 Arch Street, Philadelphia. Address J. W. Waldron, 830 Arch Street, Philadelphia.

By a first-class retoucher. Can also work in crayon and oil. Has had nine years' experience. Address Artist, Box 373, Ovid, Mich.

By a good practical photographer. Can do first-class retouching (positive and negative), oporating in wet or dry plates, printing and toning. Wages twelve dollars a week. Philadelphia preferred. Address Photographer, 215 Lloyd Street, Milwaukee, Wis. As printer and retoucher, by a young man. Address Photographer, Box 438, Raleigh, N. C.

By a first-class operator, retoucher, printer, and toner. Can do first-class wet or dry-plate work. Salary not less than fifteen dollars a week. Address William Neff, Lebanon, Ky.

By first-class photographer. Well up in dry plates and all other branches. Will instruct any photographer how to make his own dry plates. Address Baskman, Photographer, Box 80, Newton, N. J.

By a lady, as retoucher and general receptionroom assistant. Can come well recommended. Address Retoucher, care Campbell & Camp, Mansfied, Ohio.

As operator. Has twelve years' experience. Does not use liquor or tobacco in any form. Can furnish first-class references. Only those desiring a good operator need apply. Address Photographer, care Box 225, Delphos, Ohio.

As retoucher, and to take care of front office. Address, stating terms, Retoucher, 39 Pynchon Street, Springfield, Mass.

By a lady retoucher. Address L., Norristown Post Office.

By a young man, with ten months' experience in first-class gallery, as printer or printer's as sistant, with a chance to learn all parts of the business. Good recommendations. Address Frank B. Feetham, Box 1705, Duluth, Minn.



J. L. CLARK, GOLD AND SILVER REFINER,

ASSAYER AND SWEEP-SMELTER, REMOVED TO

823 Filbert St., Philadelphia, Pa.

RETURNS MADE IN STRICTLY PURE CHEMICALS.

REFERS TO. BY PERMISSION:

JOHN CARBUTT, Dry Plate Manufacturer, Philada.

WM. H. RHOADS, Photographer and Artist, Philada.

GILBERT & BACON, Photographers and Artists, Philada.

WM. H. CLIFFORD, Photographer and Artist, Philada.

ALBERT MOORE THE SOLAR ENLARGER,

the longest, largest, and best. 828 Wood Street, Philadelphia.

PASSAVANT'S DRY PLATES

ARE CONCEDED BY THE LEADING PHOTOGRAPHERS OF THE PACIFIC COAST TO BE

THE BEST AND MOST RELIABLE IN THE MARKET.

Specially for Portraiture and Instantaneous Views, requiring one-half the time of other Dry Plates, working with great softness and delicacy.

For ordinary Studio Work and Landscape

		Per	Doz.	!				Per Doz.			Per Doz.
31/4 x 41/4,		80	60	5	x	8,		\$1 75	10 x 12,		\$5 00
									11 x 14,		
41/4 x 61/2,		1	20	8	x	10,		3 40	14 x 17,		12 00

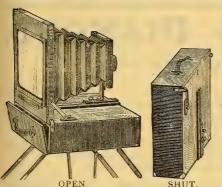
PRICE LIST.

Numerous testimonials from all parts of the States at hand. Try them.

Passavant's Photographic Dry Plate Factory,

734 POST STREET, SAN FRANCISCO, CAL.

General Agent, OS AR FOSS, 841 Mission St., San Francisco, Cal.



SCOFIELD'S

Unique Camera.

A folding 8x to box for the studio or field, solid mahogany, reversible swing back, sliding front, for single or stereo lenses and any size plate up to 8x to. Simple, rigid, compact, elegant, and built to stand the racket. It forms when closed a solid box 14x 14 inches and 3¾ inches thick, weighing, complete, 7½ pounds. Send for circular.

1 box complete, with one plate holder, . \$25 00

C. H. SCOFIELD,

25 & 27 Columbia St. UTICA, N.Y.

F. DRESCHER & CO.'S Improved Gelatine for Emulsion.

Made on a new and improved method, is the best and purest, the most reliable, and gives the best results.

UNRIVALLED FOR THE PURPOSE.

TRY IT! USE IT!

OBTAINABLE FROM ALL DEALERS IN PHOTOGRAPHIC MATERIALS.

THE ART UNION.

ART JOURNAL FOR PHOTOGRAPHERS.

PUBLISHED BY

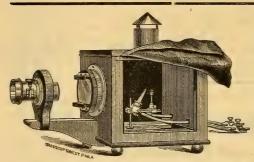
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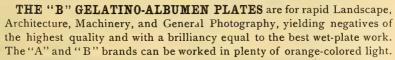
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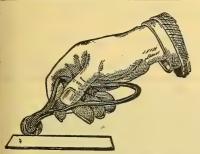
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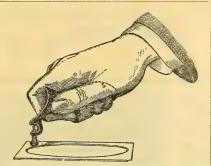
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2\frac{1}{8} x 3\frac{1}{4}	$3\frac{1}{2} \times 4\frac{7}{8}$	$5\frac{1}{2} \times 7\frac{1}{2}$	7×9^2	$2\frac{1}{8} \times 3\frac{1}{8}$ $2\frac{3}{4} \times 4\frac{1}{4}$ $3\frac{7}{8} \times 5\frac{1}{4}$ $3\frac{7}{8} \times 6$
28 x 38	$3\frac{5}{8} \times 5\frac{9}{8}$	$5\frac{5}{8} \times 7\frac{5}{8}$	7½ x 9½	$2\frac{5}{16} \times 3\frac{15}{16}$ 4 x $6\frac{1}{8}$
25 v 25	4 - 23			FOR STEREOGRAPHS.
$2\frac{5}{8} \times 3\frac{5}{8}$ $2\frac{7}{8} \times 4\frac{1}{4}$	$4 \times 5\frac{3}{8}$	$5\frac{3}{4} \times 7\frac{3}{4}$	$7\frac{1}{2} \times 9\frac{1}{2}$	Arch Tops. Round Cornered. Round.
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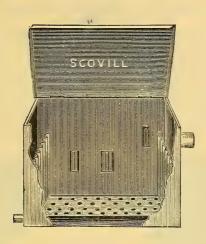
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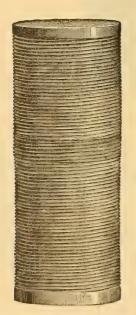
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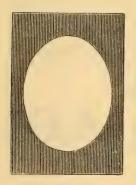
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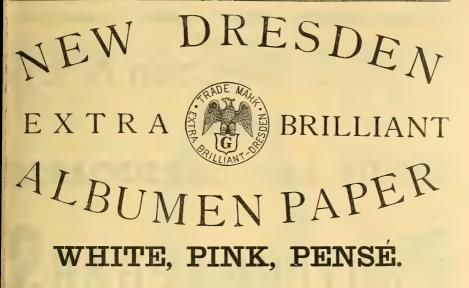
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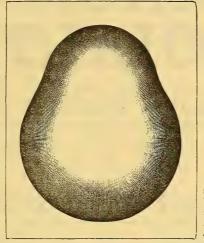
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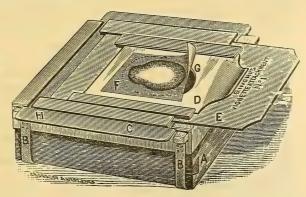
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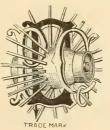
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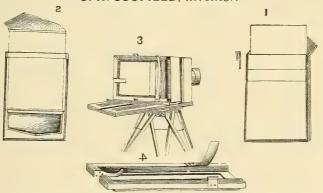
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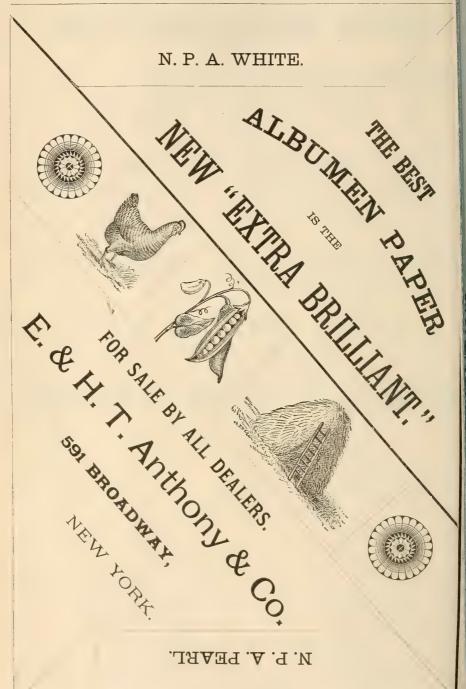
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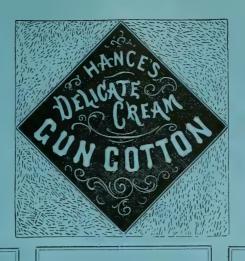
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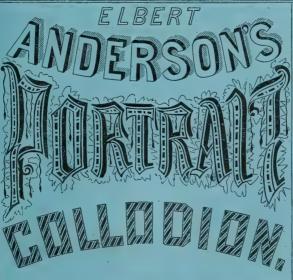
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Philadelphia Photographer.

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Vol. XXI.

APRIL, 1884.

No. 244.

WORDS FROM THE WEST.

AT a meeting of the Amateur Photographers' Society of Chicago, held on the evening of the 18th of February, Dr. Garrison read a very exhaustive paper on the different kinds of glass used in the darkroom. He procured samples of all the colored glass he could find, exposed sensitive plates to each of them, and carefully noted the results, and exhibited the negatives to the members. He also made experiments with two colors in combination, green and orange, etc. His conclusion was that the red light was the best, but that it was not perfectly non-actinic, and advised photographers to develop as much as possible in the dark. Dr. Garrison spent a great deal of time, labor, and expense in these experiments, and his researches are of untold value to the photographer. What professional would undertake the same labor of love, and yet many photograpoers are unjustly prejudiced against the amateur. They ought to recollect that most of the valuable formulæ which they work, and many of the improvments in the profession are due to these same amateurs.

Business, since the first of January has not been the best. In most localities bad weather has been the rule, and sunlight the exception. Throughout the Ohio Valley unprecedented rains have prevailed, and some photographers have not, on the 1st of

March, been able to get off some of their Christmas work.

CHICAGO is cursed with the bane of low prices. In an advertisement in the newspapers we saw that one photographer advertised one dozen cabinets and two large beautiful panels for three dollars.

It is a serious question what effect the low prices prevailing in many places is going to have on the general business of photography. Many well-informed persons have a very discouraging opinion on the subject. We would advise the photographer who thinks he can improve business and make money by reducing prices, solemnly and seriously to deliberate upon the subject before taking a step in that direction.

WE continue to hear good reports from Cincinnati, as to the coming Annual Convention in July. Mr. Weingardner, the Secretary, is indefatigable, and everything points in the direction of success.

Mr. Cady, of P. Smith & Co., Cincinnati, writes us that while the flood was immense, it did not get up to the doors of the "Old Reliable" depot. For the second time in Cincinnati, they had more water than lager.

What a fearful punster is Brother Allen, of Detroit. He is Orville (awful). Is a key required?

WE hear of a new stock-house in Chicago. It was opened in March. Mr. Smith, of Quincy, Ill., and Mr. Patterson, for so many years with H. J. Thompson, are the projectors. Success to them.

WE learn that most of the photographers on the Ohio River, from Pittsburg to Cairo, were submerged more or less by the flood. Many of them had ten feet of water on their first floor. Lawrenceburg, Ind., suffered, probably the most, and we doubt whether the chimney of Mr. Zingley's gallery could be seen during the worst.

On what subject shall papers be read before the Convention? We would like to hear from our subscribers what they would most like to hear ventilated. Perhaps it might be worth while to discuss something besides dry plates.

OUR INFLUENCE.

In order that our readers may get some idea of the circulation of the *Philadelphia Photographer*, and the extent of territory included in our subscription list, we print below a few of the letters received by us from some of our most distant patrons:

"Kindly mail a copy of *Photographic Mosaics* to Carl Ricker, Nevsky Prosp. No. 14, St. Petersburg, Russia.

"Sampson Low & Co.,
"Fleet Street, London, Eng."

"Please increase my order for the *Philadelphia Photographer to twenty-two copies* for the year.

"WM. CARGILL,
"Photographic Stockdealer,
"Sydney, New South Wales,"

"Please send the Philadelphia Photographer, for 1884, to the following parties: Messrs. E. J. Kildare & Co., Guatemala, Central America: W. L. Zuber, Mazatlan, Mexico: and also increase the order of those sent to my address to fourteen copies for 1884."

"Osc AR Foss,
"San Francisco, Cal"

Our list also includes subscribers in Singapore, East Indies, Valparaiso, Chili; Tokio, Japan; Auckland, New Zealand; Alexandria, Egypt; Hayana, Cuba; St. John, Newfoundland, to say nothing of the long list of names from Germany, France, England, Scotland, South America, and Mexico. Australia, indeed, has quite a list by herself, twenty-six subscribers being supplied there every month. Wherever in the known world a white photographer lives and works, there you will find the *Philadelphia Photographer*, and we can say with perfect veracity that, like the Queen of Great Britain, "the sun never sets on our patronage."

MORE WORLDS TO CONQUER, IN PHOTOGRAPHPY.

BY C. PIAZZI SMYTH, Astronomer-royal for Scotland.

HAVING been favored lately with a full collection, by that admirable example of the photographer, artist, operator, publisher, and man, Mr. Edward L. Wilson, Philadelphia, U. S., of his Egyptian series of pictures on glass for the lantern, I proceeded to wrestle with them in private, comparing them with my own series of the Great Pyramid, taken sixteen years previously. Mine had been taken not only on wet collodion, but the wettest of the wetviz., in the very silver bath itself; and this was for the sake of securing a maximum of rapidity, combined with that sensibility to variations of quality, as well as of mere light and shadow, which always made, in my humble estimation, a good wet collodion picture so much more luscious, fruity, picturesque, and truly artistic than the mere black-and-white results of the dreadfully slow dry plates of those days.

Had the comparison ended otherwise, any one would have been entitled to object that I was too interested a party to give an unbiassed judgment; but terminating as it did, after several severe examinations, both by daylight and artificial light, and with magnifiers of various kinds, in Mr. Wilson's favor, I may, perhaps, be listened to for at least some of the details, and a few general impressions also.

The fineness of the grain, then, the engraver's "color" of the shades, the delicacy of some, and power of others, of the middle tints, and the proofs of rapidity in Mr. Wilson's plates, were equal to anything

accomplished with my wet; while his were all dry plates, but of that transcendent variety, viz., the modern gelatino-bromoiodide plates. So behold what has now been accomplished thereby for the traveller, seeing that these plates were all prepared in America before Mr. Wilson went out to the East, and, with a few trifling exceptions, were all developed in America after he came back-leaving nothing but simply the camera exposures to be made in foreign lands. Hence, no endangering of the burning at sea of the ships he sailed in, by carrying combustible fluids like ether and alcohol in his boxes; no vainly seeking after supplies of distilled water in barbarous cities, or water of any kind in rainless regions of desert lands; nor loss of precious liquids by sand blown in, preventing glass stoppers fitting close; no difficulty either in making longest exposures in dark places, nor holding a plate ready any length of time at the tip-top of its sensitiveness for a snap-shot at some momentary phenomenon whose appearance cannot be compelled at pleasure.

In short, at this rate, has not photography risen at last to its full perfection—colors, of course, excepted—for what worker expects to see them come by the agency of nitrate of silver and pyrogallol, or any combination on that principle? There is, however, some practical improvement of possible things still to be effected, and one of Mr. Wilson's Cairo views indicates it at once, when showing us an orange tree with no perceptible difference between the fruit and the leaves, except the shape.

Can you be satisfied with such a presentation as that, my friends—all of you, at least, who have ever seen that most brilliantly contrasted thing in nature, an orange tree in full fruit and full leaf, as Professor Alexander Herschel has long since pointed out?

A learned German paper, in a late number of Mr. Wilson's journal, published in Philadelphia, discusses the particular part of the spectrum of light most powerfully represented in the new gelatino-bromide of silver plates, and considers that in some firms' make it is in the blue, and in others in the indigo, or beginning of the violet;

in which case, evidently, neither the orange of the fruit, nor the green of the leaves, can ever come in for a fair share in the actinic effects produced, and constituting the ultimate picture.

This is, however, an old, old story in photography, and I only bring it up once again on this occasion to append to the catalogue of prospective advantages depending on its solution, some further consequences derived from recent spectroscopic experiments of my own on rather a large scale, and carried out to a very intense degree, as thus:

Bromide of silver violet to transmitted light is the first and easiest result which bounteous nature yields to chemistry. But if that born genius of military engineering (Captain W. de W. Abney, R.E.), joined to photo-science, has been enabled, by peculiar processes of his own invention, to make silver molecules deep red under the same circumstances, why should not the whole army of photographers throughout the world prepare among themselves little silver molecules of an orange or yellow color?

Of this, at all events, they may be assured, that man, barely, if at all, sees by the spectrum's violet light. There is something in it, as it were, uncanny, and which the human eye is not qualified to apprehend, and never will. To man, a mixture of lakered and Prussian-blue makes beautiful violet; but the spectrum will have none of it. For such a mixture, if it could be kept mixed, would be less, instead of more, "refrangible" than plain blue; and no man can put any pigment into blue which will increase its "refrangibility," or the only test which the spectrum respects as to what is violet.

Moreover, the human eye has not the power to appreciate true spectrum-violet, even when set straight before it; for though a photo-plate of the violet bromide of silver order copies the lines in that part of the spectrum with any amount of sharpness of definition—they appear to the living eye only faint, broad, and hazy, focus as you will.

In fact, with a large table spectroscope for eye observation, when in the orange part of the spectrum, I can never put on sufficient prisms or magnifying power to reach the limits of what seems like perfect definition; in the violet part, on the contrary, I can never sufficiently reduce both the prism, or the "grating," and magnifying, power to come at tolerable definition, or sharpness, clearness, and force of light, whether with dark lines on a bright, continuous spectrum, or bright lines in a discontinuous or dark field spectrum. Whence we may reasonably hope, that with orange bromide of silver, if such a thing should ever be prepared, we shall, over and above obtaining orange trees with their round fruit in brilliant contrast to their dark green leaves, we shall, I say, also have definition of all things red, yellow, citron, so marvellously improved in sharpness, that new applications in science will quickly follow.—Year-Book of Photography, 1884.

PASSAVANT'S PYRO DEVELOPER.

BY DR. S. C. PASSAVANT.

Solution No. 1.

	2		
Distilled Water,		- 8	ounces.
Sulphite of Soda,		2	4.6
Citric Acid, .		60	grains.
Pyrogallic Acid,		1	ounce.

Solution No. 2.

Carbonate of Potash	n, C.	P.,	$_{\rm S}$	ounces.
Sulphite of Soda,			2	6.6
Distilled Water,			16	44

Stock Solution: Equal parts of solutions Nos. 1 and 2. Pour No. 2 into No. 1. The stock solution will keep from six to ten weeks if the bettle is kept well corked.

For use take, for 8 x 10 plate, water five ounces, stock solution two drachms.

With over-exposed negatives, add more water and six to ten drops of bromide of potassium solution (fifty grains to the ounce).

With under-exposed negatives, add more stock solution, or a few drops of solution No. 2

Before fixing, immerse the plate in an alum bath (fifty grains to the ounce), from one to two minutes, which will take out the yellow stain.

Do not put instantaneous views in the

alum bath, as they have a tendency to come out thin, and the stain gives them better printing qualities.

The longer the plate is washed after fixing, the more intense the yellow stain will become.

This developer requires less exposure than any other; the negatives will never want intensifying.

SAN FRANCISCO.

OUR AMATEUR CLASS.

BY AN OLD AMATEUR.

SELECTION OF THE NEEDFUL APPARATUS.

(Continued from page 36.)

THERE is an old saying, "A good workman can work with poor tools," which, though true in the main, is liable to misinterpretation. Experience teaches that good workmen always, when possible, make use of the best tools for their peculiar work. The skill they have acquired is the resultant of the habit which has been gained by the constant handling of the best apparatus, and when necessity demands it they can, it is true, accomplish better work with poor tools than less skilled artisans, but, from the nature of things, it can be done only with a greater outlay of energy.

The desire which some persons have of courting difficulties, of enticing obstructions, in their way, is not always praiseworthy, and sometimes it betokens only a pugnacious disposition. Why should we climb over hills or jump precipices when we might reach our goal more surely, and at the same time more comfortably, by keeping along the even road which art and science have levelled for us?

We have frequently heard the boast, "This view was taken with the clumsiest and most ungainly apparatus, but see with what good results considering the circumstances." To those who delight to carry the donkey on their own shoulders instead of letting the donkey carry them over the brook we have nothing to say by way of advice in the selection of their apparatus, but leave them to their thoughtful cogitations over cigar-box cameras and pin-hole lenses.

To those who wish to produce artistic work and not feats of legerdemain the few remarks which follow, we hope, may be of service.

The first thing to which the amateur should give his special attention is the camera-box. Let it be light, but well made; perfect in workmanship and beautiful in polish. Perhaps the advice of Polonius to his son might be safely followed here—

"Costly thy camera as thy purse can buy,
But not expressed in fancy; rich, not gaudy."

For the camera oft proclaims the operator.

The American Optical Company has reached the *acme* in the production of apparatus.

When short trips are taken it is best to have a number of extra plate-holders. By filling them in your dark-room at home you can start out with your mind free, but if a long excursion is contemplated, it may be necessary to provide a changing bag, which may be had of any dealer.

It is well to have a number of different fronts to your camera for the different lenses which you may find necessary to use.

Never select a camera without a swing-Old fogyism may extol the rigid camera of our forefathers, but the progressive photographer will take care to provide himself with the best swing-back he can find. The crooked lines produced by the rigid back will make anyone possessed of an artistic eye consign his old machine to the precincts of the lumber-room. The single swing-back will, however, suffice for ordinary work. The double swing-back has its peculiar advantages, but requires more care and experience in its management to get a true focus of the image upon the groundglass. It is sometimes necessary to use it for short range when the foreground is close at hand.

The amateur, captivated with the beauty of the landscape, is sometimes inspired with the idea of producing a large picture of the scene before him, and becomes possessed with a longing for a large camera, and accordingly sells all that he has, his small 4 x 5 box included, and invests in an 8 x 10, but only to find that what was easy to accomplish with the small camera becomes almost

insurmountable with the big one. It is best to keep satisfied, for some time at least, with the small box, until experience has ripened the bud of ability into the full-blown flower of perfection.

The selection of the tripod or stand which is to hold the camera-box is not to be held of small worth. The amateur too often looks more to lightness than to stability. Now while we by no means advocate the carrying of too much luggage, there is a certain amount of stability demanded which is incompatible with too great lightness. The bed of the camera must have a solid base upon which to rest, otherwise there will be a constant vibration, which will tell wofully upon the sharpness of the view.

Perhaps there is no part of the apparatus over which the beginner expends so much thought and worry as the selection of the lens. Success in landscape, as well as in portraiture; depends in a great measure upon the proper choice and right use of the lens. Among the many forms and makes of lenses it is no wonder that the inexperienced become bewildered.

In the selection of a view lens the following points should be determined:

1st. The size of the picture.

2d. The amount of the subject intended to be included.

3d. The character of the picture; that is, whether it is intended to be an architectural view or a landscape.

We have said before that on general principles it is a good plan for the beginner to confine his work to small-size plates, and we here may add that this fact should be taken into consideration in the selection of the lens. The increase in the size of the plate is always attended by an increase in the difficulties of manipulation, and an increase in the labor of transportation, and, we may also add, an increase of the expenses.

Concerning the amount of view to be included in the picture, that is, what is called the angle of view, we may say it depends upon the relation to the focal length of the lens. That is, the angle will be larger with a short focus, and less with a long focus. It is a common failing with the beginner to try to get the largest angle of view possible. Now this is a mistake. If perfection of de-

lineation is desired, or perfect truthfulness of the translation of the scene upon the ground-glass, a long-focus lens must be made use of, and hence a necessary limitation in the field. If a short-focus lens is chosen, there will be an exaggeration, often amounting to such a degree as to give an entirely false conception of the scene.

Now the question will be asked, How much of the field is proper to include in the picture?

Here the judgment again or good sense must come to our aid. The view which our angle of vision includes is perhaps the best guide. I believe the angle of normal vision is not over sixty degrees, therefore if the photographer desires to convey to the mind of the beholder a true impression of what his eye has seen, he must limit his angle of view, otherwise there will be exaggeration. The objects in the foreground will be too large and the distance diminished if not dwarfed. Hence it follows that wide-angle lenses are to be used with caution, and only when beauty is paramount to truth.

The focal length of a lens should not be less than the base line of the picture; that is, in a 4x5 camera it should not be less than five inches, but rather more. However, it is not well to rely wholly upon one lens to do all kinds of work. Special work demands special lenses. The same lens cannot make an instantaneous work and a copy equally well. The Euryscope and the rapid rectilinear lens have a wider range in this respect than any others. For architectural views a rectilinear lens is indispensable, and one of moderate angle is here also to be chosen. Above all, select a lens perfectly free from distortion and flare; these points are of more account than brilliancy of surface.

When a single combination lens is used, a certain amount of distortion will be perceptible in the lines of buildings, but this may be rendered less by keeping the line of buildings away from the extreme margins of the picture.

A word, in conclusion, about instantaneous shutters. There are all varieties, from the simple old-fashioned drop to the elaborate graduate shutter. On general principles it is best to make use of the simplest. The pneumatic drop offers peculiar advantages in the ease and rapidity with which it may be worked. A view is not infrequently lost during the time consumed in arranging an elaborate apparatus.

TO REMOVE OPAQUE SPOTS FROM DRY PLATES.

How I take opaque spots off my dry-plate negatives—I use the Cramer dry plate. I make a weak solution of oxalic acid, and pour it into a developing-tray; I wet the negative with the spots on it, and lay it in the oxalic acid solution; I then rock it back and forth, until the spots disappear. I next wash my negative, and set it up to dry. If this is of use to anyone, he is welcome to it.

E. J. SHADLE.

LATROBE, PA.

REMARKS ON THE CHLORIDE OF GOLD AND CALCIUM TONING OF MR. ENCAUSSE.**

BY E. PERROT.

AFTER many experiments—all more or less unsuccessful—made with the double gold and calcium toning of Messrs. Encausse & Co., I feel obliged to give some advice to amateurs about the toning baths to be used.

I will first give an account of my experiments with the Encausse toning, which, it appears, prevents sulphuration. Upon this point I shall be silent; for in order to ascertain this fact practically ten years would be required, and ten years ago this product was not known. Mr. Encausse by his toning cannot certainly prevent albumen from becoming yellow, and consequently producing the complete coagulation of this substance. Bichromate of potash and alum, even, would not do it. Again, concerning the rapidity of his toning there is much to say. I will content myself by stating what has happened in using toning baths obtained from different manufacturers, with that furnished by Mr. Encausse, and with that prepared by me. The cases are similar.

I took two kinds of paper:

1. Garini brand; nine kilogrammes;

See January number of the Philadelphia Photographer.

pink; sensitized by the method indicated by Monckhoven.

Ordinary commercial paper, already sensitized.

In regard to the time of toning, the Garini paper required from thirty minutes to one hour; and the other from forty-five minutes to two hours. Some prints toned to the blue even completely lost their toning in the hyposulphite and in the sulphocyanuret of ammonium.

As a comparison, I will mention the following toning bath, which costs about the same price:

2000 grammes of filtered rain or distilled water; 25 grammes of crystallized acetate of soda. Dissolve for half an hour, shaking occasionally. Add 1 gramme of chloride of gold.

In using this bath, take 250 grammes of filtered rain-water, and add 100 grammes of toning. This bath, without being strengthened, can tone thirty prints 13×18 centimetres. Keep the bath that has been used, and after filtration it is sufficient to add a few grammes of the fresh bath, according as we wish to tone more or less rapidly. With the indications given above, here is the time required: Paper sensitized by the Monckhoven process, five to fifteen minutes, according to the temperature; commercial paper, twenty to fifty minutes. In operating with the commercial paper, it is necessary to wash for two or three minutes.

If sulphuration exists by this process, it is nevertheless true that I possess prints which, although exposed for more than six years to many causes of change, show nothing more than the yellow color of the albumen.—Paris Moniteur.

DRYING GELATINE PLATES WITH ALCOHOL.—When much hurried, the drying of sensitized gelatine plates may be hastened by plunging the plate, after it has been covered with the emulsion, in a dish containing alcohol. After an immersion of two minutes it is withdrawn, drained on bibulous paper and dried, which is rapidly effected. The alcohol, after a certain time, should be poured upon dried potassic carbonate; the upper layer of liquid in the vessel consists of highly concentrated alcohol.

IN THE MATTER OF THE DRY.

BY E. B. CORE.

Mr. Cramer says: If you know your plate to be over-exposed, use a weak developer. If you want fine, delicate negatives, use weak developer; i.e., if your effects are too contrasting, use weak developer. Now to sum up: An over-exposure, flatness; weak developer, flatness; mix, shake—presto! change—a brilliant effect.

Maybe, I do not shake enough; but I do not get the brilliant effect any way. I have found but one good remedy for an over-exposure, and that is, throw it away. If that is not to be thought of, I would say, use oxalate with bromide added.

I have found that by using Cramer's developer—and that is what I prefer—strong, say from six to eight parts to one of stock, I am better able to regulate the exposure, or, rather, am not so likely to get an overexposure as with the prescribed eleven to one, and am in every way better satisfied with the result obtained. As a hypo eliminator, I am using something given me by a gentleman whose name I am unable to furnish, and here it is:

No. 1.—Dry Chloride of Lime, 2 ounces. Water, $..24$ "

No. 2.—Carbonate of Potash, 4 ounces.
Water, . . . 8 "

Mix and filter.

For use, take one ounce to sixteen ounces of water. Wash the plate out of hypo and flow twice, allowing it to remain on the plate thirty seconds each time; after which wash lightly and set up to dry. I don't know if this is new to anyone, but I have used it with good effect for nearly a year.

STAMP PORTRAITS.

Mr. C. H. Tonndorff, 1423 Chestnut Street, St. Louis, Mo., has introduced a novelty lately which promises to be very acceptable to photographers. The novelty consists in portraits being made of about the size of a postage stamp, some twenty-five to a sheet, perforated and gummed the same as postage stamps, and the uses of which will be suggested to any party who owns a lot of them and tries to use them. Of course, they cannot be used as a substitute for postage stamps, but they can serve a useful purpose for business cards, letter heads, or an extra safety seal to an envelope, for advertising purposes, and a thousand other useful objects, which will increase in number as the tiny novelty becomes popular.

Mr. J. F. Ryder, Cleveland, Ohio, has become agent for Mr. Tonndorff, and will supply circulars and prices on application. In order that our readers may see more fully exactly what the new thing is, we have secured from the new manufacturer sufficient examples to supply each of our readers with a copy. They will find it on the back of our cover in the shape of a portrait of Mr. G. Cramer, the well-known and popular dryplate manufacturer. For further particulars, send for circular and see advertisement.

TAKING OF PETRA.*

WHEN a lecture by a competent person goes away from the beaten track to take us into new fields of human interest, that is a decided gain to the public. When, in addition to this, the lecturer has himself visited the strange places he describes, and taken accurate views of the objects he shows when he has been upon the spot and speaks from his personal knowledge-his discourse has large additional value. And especially is this the case when the main subject is entirely new to the great mass of the people. Of this description was Mr. Edward L. Wilson's illustrated lecture, "The Taking of Petra," delivered and exhibited at the Academy of Music on Monday night. was a revelation to most of the large audience

present on that occasion. Of course, there were those present who had heard or read of Petra; but there must have been very few who were prepared for such a realizing sense of that strange place. It is a ruined city along streets that are sunk deeply in gorges, or rather crevices, in the rugged mountains of the Bible "land of Edom," and a city where the temples, palaces, and burial places, and nearly all the structures of which it is composed, are chiselled or hewn out of the solid rock. It does not appear that there were any buildings there to be used as dwellings, the Arab inhabitants of the country probably dwelling in tents then as they do in our day. The one great characteristic of the place is that its monuments, temples, circuses, castles, forts, palaces, or whatever they may have been, were, with but very few exceptions, hewn out of the rock by chisel or axe. What people executed these marvellous and colossal works-colossal in the enormous labor they demandedis not known. The time in the world's history when the work was done is equally unknown. As to these matters, there is no recorded history. Petra is mentioned in the Book of Kings under the name of Selah, which is said to mean a rock, as Petra itself does in Greek. It is mentioned by Strabo and Pliny, Josephus, Eusebeus, and Jerome, but none of these tell us about the people or the age to which the rock temples and monuments are to be referred. It was the capital of Arabia Petræa, that is, mountainous Arabia, on that side of the desert, and is the "Selah" which Amaziah, King of Judah, took in the war, when he "slew of Edom in the Valley of Salt ten thousand." Strabo says it was the metropolis of the Nabathæans, "shut in by rocks round about, but within having copious fountains for the supply of water and the irrigation of gardens." It appears to have gone out of sight of history from about the sixth century of our era to quite modern years. John Ludwig Burckhardt appears to have been the first modern writer and traveller to revive the memory of the place. This was about 1822, in his Travels in Syria, when he sought to identify the wonderful ruins in Wady Moosa with the ancient Petra. Some few travellers have succeeded in getting there, but very

Inasmuch as this article is a compliment to modern photographic accomplishment, we give it place here. Photography each year becomes more and more the greatest helper to art, science, and exploration. We honor it on all occasions.

-Eo, P. P.

few indeed. Our fellow-townsman, Edward L. Wilson, who was the photographist of the Centennial Exhibition, is one of them. By dint of considerable personal risk, and no little strategy among the suspicious and jealous Arabs of the vicinity, he got to Petra in 1882 with a caravan of camels and horses bearing his cameras and other photographic outfit, and a small train of auxiliaries. The ruins are far out of the way of ordinary caravan travel (about ten days' travel, we believe, through the most barren and difficult country), and the Arabs resolutely resist every attempt to explore them by reason of the tradition that they conceal great treasures. Mr. Wilson did get there, however, and we have the grand result in his illuminated pictures and in the narrative with which he accompanies them. He takes his audience with him through the journey, into the narrow mountain defiles, through the sunken streets, and shows them the surprising remains of a city almost unknown to civilized man. The forms, dimensions, proportions, ornamentation, and grace of the structures delight the obseever and the hearer at every stage of progress. There is a strange mingling of styles of architecture. Of course everyone is ready to find architecture of the Egyptian type as seen in pyramidal forms and in obelisks; but who could expect to find Corinthian facades of the most graceful forms in such a place? Yet these abound, and are the most prominent objects in the photographic views, except those devoted to burial purposes. In the absence of recorded history with regard to these structures, the observer begins to doubt whether we get our Grecian colonnades, pediments, and entablatures from the people who inhabited this Arab wilderness of barren rocks, or whether that noble style of architecture was carried there by means that no one can now understand. And it is to be remembered always that these structures, the comparatively well proserved remains of which we are shown, were made (not built) as no other Grecian temples were ever constructed—their fronts, columns, and all being hewn from the natural rock standing in place, and their interiors excavated by the same means.

We cannot go further into details, except to add that the rock is sandstone of many

colors-red, purple, yellow, bluish-green, and others in a variety of shades. This gives unusual attractiveness to the pictures in all cases where the natural colors are introduced. As already said, the lecture is a revelation of a world comparatively unknown to archæology, architecture, ethnology, geography, and general science. It furnishes materials not only for the study of the savant, but of most interesting instruction to the popular mind. Petra and the country round about it are impossible places, in their present condition, to support life in a numerous population; and yet large numbers of people must have been there for several generations, or these wonderful works could not have been constructed. Who were they, and when was this surprising city cut in the solid rock? - Philadelphia Public Ledger (Mr. George W. Childs's paper).

THE GREAT MASTERS.

BY WM. H. SHERMAN.

UNDER this title I intend to write a series of articles in which I shall endeavor to give a brief review of the history of art, bringing into notice its most salient points, and especially the great masters whose works have done so much to ennoble mankind, and of which, those that have been handed down to us, are the most highly prized treasures that the world possesses. I hope to be able to instruct those who have not given much attention to the subject, and that the subject may be of sufficient interest to commend itself to their attention. The best wish that I can express, is that some who have not studied art outside of photography, may be tempted to do so by such glimpses of the great world of art, of which we claim to form an humble part, as may be given in these sketches. It matters little that the kinship of photography to art is denied. With brush in one hand and palette in the other, the portrait painter may proclaim that the photographer who produced the original of the picture which he has faithfully and laboriously transferred to canvas, is no artist. Still it remains an open question which is the artist and which the mechanic; each must win the title that befits him. It is no

question of precedence which the rules of etiquette may decide. A ploughman may prove to be a poet, a blacksmith may prove to be a sculptor, a sign-painter may develop into a master of high art, and under the garb of a photographer may be discovered an artist. But each must prove his claim to his title of nobility by his work. poet must do something besides tilling the soil, the sculptor must leave his anvil and forge for the implements of his higher calling, and as the painter may paint signs till doomsday, so may the man of the camera make pictures up to the same eventful date, and neither show signs of being an artist. Paul Potter used the same tools when he painted his "Young Bull," which made him famous, that he used when working as a mechanic for his employers. So the photographer may do commercial work, and produce good mechanical pictures to please his customers, with the same instruments and materials that he uses to win the medal of taste and artistic excellence. It is not the question whether he be called painter or photographer, but what is behind the brush or the camera? Is it the soul of an artist or the hand of a mechanic? That is the question.

As the poet will not fail to read the works of the immortal bards who have climbed Mount Parnassus before him, as the student of literature will ponder over pages of forgotten and unforgotten lore, as the historian will delve among the archives of the past, so will every artist and every artstudent do well to study the great works which the masters of past times have produced. So we, as photographers, may study the lives of these great masters if we will. We may acquaint ourselves with their works by the aid of copies which our own art, thanks to its aid, has placed within our reach. We may draw inspiration from the treasures of art which they have bequeathed to all, of whatever name or title, who have the eye to see and the soul to enjoy the priceless legacy. It matters not that we were not named in the will. The world's high court of chancery will settle the claim in equity in due time,

In the mean time, what is there outside of photography that can be studied with greater advantage by photographers than the history of art illustrated by the works of those who have achieved its greatest triumphs? As one becomes familiar with these masterpieces "a change comes over the spirit of his dream." Unconsciously he begins to have new perceptions. He is surprised that some beautiful object of other days-some supposed delightful painting perchance, has grown to be flat, stale, and unprofitable, while he discovers that some "ugly, horrid thing," an etching by Rembrandt, for instance, is instinct with beauty. Here is a fragment from the pediment of the Parthenon. One may doubt his conversion if he fails to see the grace and beauty of those chiselled lines. Education in art is a door to a new life. Of those who pass the portal, none ever choose to return. Although it is not to be expected that photographers, as a class, will become thorough connoisseurs, they may and ought for their own satisfaction and artistic credit, acquire a fair degree of general knowledge of the history and development of art, its great periods of growth and decline, of glory and effeminacy, of strength and decay. They should acquaint themselves with the most important masterpieces that mark the distinct epochs and schools of art. They should know something about Greek art and its distinguishing traits, of the Great masters of the fifteenth and sixteenth centuries, of Albert Durer, Michael Angelo, Raphael, and their contemporaries and successors. Such information as this, is not difficult to acquire, and once on the road, no one who has within him a spark of love for art will ever turn back or cease to find something to study and admire, until he ceases to breathe. We must look beyond the limitations of photography for breadth of culture. In time we may be able to convince an unbelieving world that a photographer may be an artist.

In concluding these prefatory remarks I shall mention some of the best works on the subject, for the information of anyone who may wish to possess an art library of his own. For a comprehensive work, Luebke's Outlines of the History of Art (2 vols.) is the best. Next to this is Kugler's Handbooks of Painting (4 vols.);

then Woltman & Woermann's Ancient, Early Christian, and Mediæval Painting (1 vol.). As an elementary work, Radcliff's Schools and Masters of Painting (1 vol.). As a book of ready reference Clement's Painters, Sculptors, Architects, and Engravers (1 vol.), also Bryan's Dictionary of Painters and Engravers, a large volume. With these books one is well furnished for the study of the history of art. If he does not feel like incurring much expense he might find satisfaction in reading Radcliff's work mentioned. Taine's Lectures on Art are excellent reading, and are worth possessing by every studious photographer.

In my next I shall have something to say about ancient sculptors and painters.

BACKGROUNDS FOR PHOTOGRAPHERS.

BY G. HANMER CROUGHTON, of London, England.

The short paper upon this subject contributed to the Year Book, for 1883, has brought me several letters from photographers in various parts of the country, asking me to write a more extended paper, pointing out what to choose and what to avoid, with a hint to those who may wish to make their own backgrounds. Thinking that it may be a subject which would interest many more than those who have written to me, I comply with that request.

Much has been written before, and with good effect, for we do not see such glaring inaccuracies in background painting as were common some years ago; but there is much to be corrected by the background painter, and still more by the photographers who buy backgrounds without knowing exactly what they want. Many photographers think but very little upon the subject when buying a plain or fancy background from the dealers, buying them from photographs shown by travellers, content that they look pretty and troubling nothing about their fitness as backgrounds to a portrait.

I am taken to task by one of my correspondents for writing as if I took it for granted that my readers know something of the art rules which should guide photographers in their selection of suitable back-

grounds; he says, "As I know nothing about such rules I cannot understand you, and no doubt there are numbers like me, so you will perhaps excuse me if I suggest that when you write again you should begin at the A B C of the matter." I will try.

First then, what is the use of a background, and how are we to know what is suitable? I will try to answer this question by detailing, in plain terms, what we aim at in putting a background to a portrait painting.

About color, a photographer has nothing to do, so I will confine myself to the question of light and shade. According to the effect wanted, and the character of the sitter, the background is studied to bring out the best, and tone down the worst points; for instance, unless the features were very striking or strongly marked and rugged, an artist would not put a very dark background behind a white-haired old man or a fair maiden in light draperies. I own there have been exceptions, but they have only proved the rule, which is that the light and shadow on the background should lead up to and concentrate the attention of the person looking at the picture, upon the principal object in it, which in a portrait is, of course, the face. Now I am afraid my friend will say I am getting beyond him; I will give him and others a plain lesson; those who do not want it will please skip this portion as they may find it tedious.

Provide yourselves with a few sticks of charcoal, some sheets of cartridge paper, and a half length or three-quarter length portrait from any of the illustrated papers, cut the figures from the background and all other surroundings, and place it upon a sheet of white paper. Does that form a background for it? you will say no; and now why? because the outlines cutting against the white paper all round, the eyes find no rest upon any one portion, or if they are attracted to any one part more than the others, it will be to where the deepest shades of the coat or drapery cut with most contrast against the white paper. Now what does this teach? That the way to get concentration upon the head, is to deepen those parts of the background where the figure cuts too sharply against it; now take your charcoal

and rub it upon the paper round the figure, make it deeper at the bottom, deep enough to almost lose the outlines of the drapery into it and graduate upwards; now some upon the upper corners graduated downwards and inwards toward the head, and you will by this time see, roughly, how concentration in a portrait picture depends upon the background. But to carry the lesson further, darken the background upon the lightest side of the head, and you deepen the effect by the contrast of light against dark, and thus you get what artists call focus, for wherever there is contrast there the eyes will naturally fall or focus themselves.

You will naturally ask, How is this to be effected photographically? It can be done upon the usual flat photographic background in this way, either by shutting off the light which falls upon it by curtains or screens, or by graduating the light and shade upon the background itself, by a method I shall describe further on. Both plans have their advantages. I think the easiest method of getting light and shade upon a flat background, is by means of a hinged screen upon that side of the background which is nearest your light; another screen, or, better still, a curtain running upon wires, should be used for shading the top. If a three-leaf screen is hinged to the side of the background, any amount of shade can be cast upon that side, while the figure, standing clear, receives the light in front of the shaded part of the background. To keep the lower part of both figure and background lower in tone, you will have to curtain your side light up to at least four feet from the floor. When reading a paper some years ago on this subject, at the South London Photographic Society. a member present objected to the lower part of the picture having more shadow than the other part, by saying that his sitters insisted upon seeing every button upon their boots. Well, there is no artistic objection to them seeing every button when they are looked for, but there is every objection to each button clamoring for the attention which should only be given to the head. Detail you will always get in a photograph; to keep that detail in its place marks the artistic photographer.

A photographer is always safe with a plain

background; it is when he ventures into the region of scenic backgrounds that the greatest incongruities are seen; in all cases the same rules for light and shade and focus, or concentration, should apply, and here it is that our background paintings fail as a rule. One would have thought it would strike the dullest mind, that it would be impossible to light a figure through the background, and yet I know a very favorite interior background, one which has had a very large sale, where, if the figure is to be in keeping, it should be lighted from behind, for the light on the background is seen streaming through tall windows behind the sitter and towards the camera.

In buying a scenic background, see first that the light represented in your painted scene is from the same side as upon your sitters; next, that the shadows are painted falling away from the camera, not toward it. Avoid all backgrounds that show extended perspective, as they all appear too small for the figure, and very seldom carry out the perspective of the room, so that your furniture and other real accessories have a different vanishing point and horizontal line to the background. Avoid all backgrounds crowded with detail, as they are sure to spoil the concentration wanted, by dragging the eye all over the picture.

When will background painters understand that what are required of them are broad masses of light and shade, with very little detail? Well, it is not all the fault of the background painters; when photographers know what they want, and insist upon having it, the demand will create the supply. That the painters are not all in fault, was proved by an incident which I will relate as a warning to photographers, not to go and do likewise. A photographer in a fashionable visiting town, found a demand for portraits showing a local view behind as background. Naturally, he photographed the view and sent the print to a painter of backgrounds, who made a most faithful copy of the photograph; it was sent home and used, but the effect was enough to set all one's teeth on edge. Why? Because the view, in the first place, was taken with a view lens of different focus to the portrait lens used in the studio for the figure; next,

it was impossible to get the same light and shade upon the view at any time in the day from that point of view as the photographer got upon his sitter, and therefore the light and shade upon the background and sitter were out of keeping. Again, the view from which the background was painted, was taken upon a whole plate, and if a figure had been taken at the same time, standing in the same place as the sitters appear to stand when the background is behind them, he would not have been more than two inches high. Now the whole of that view being got into a space of eight feet by six, the five feet six or eight inches of the sitter, standing in front of it, looks of brobdingnagian proportions, while the view looks liliputian, and the whole thing has the effect upon even ordinary eyes that a false note has upon a musician. If photographers would only cultivate the habit of studying every one they see under every circumstance, in the house, in the cars, or on the streets, with reference to portrait-making, they would soon become convinced that to put a whole room or a ten-acre field behind a three-quarter or full-length figure, is simply untrue to nature, and most inartistic in effect.

A most easy method of making a background was published by me in the Photographic News at the time when Mr. Faulkner was selling his method all over England. It is as follows: Get half a ball of pipe-clay beaten up ready for the moulder, some lampblack, and Indian-red, divide the clay into about six parts, and mould it with the hands into thick, short sticks; put aside one to be used as it is, for highest light; take your lampblack and Indian-red and mix in proportion of one of red to three of black; take a little of this mixture and very carefully knead it into one of the sticks of pipe-clay with the hands. Enough of the mixture of black and red should be used to make a first shade of gray; next, take another stick of clay and mix with a double quantity of black and red, and so on, each stick being made darker, till the last has as much black and red as the clay will hold together; let them dry. You have now six chalks of different degrees of density, and with these your background can be painted, any gradation being obtained by rubbing the chalks into each other. Alterations and shading upon backgrounds you have, can be effected by these chalks quite easily, and with the advantage that they can as easily be rubbed off again.

F. A. WENDEROTH DEAD.

MARCH 15, 1884.

ONE of the first artists of our land has passed away; and with him photography, as well as the old order of painting, loses a grand worker.

Frederick Augustus Wenderoth was born in Hesse-Cassel, Germany, and came to this country when he was about thirty-five years old. The early part of his American career having been passed in California, the celebrity he acquired in Philadelphia dates only from about 1857. At this time he made a great mark while associated with the late venerable Mr. Williams, artist, by the introduction of his ivorytypes. As Mr. Wenderoth had adopted photography simply as an aid to his already long-trained art, these pictures soon gained for him great credit from the most cultivated people of Philadelphia. He afterwards became associated with various partners during a long course of years in business at 914 Chestnut Street. Becoming enamored of the photo-mechanical department of pictorial illustration, and expecting great results in every way from it, towards the close of his connection there, he largely abandoned his pencil, and with the enthusiasm and the inventiveness for which he was remarkable, spent, literally, night and day in presecuting the most exhaustive (and I may add exhausting) experiments in this direction. The world gained in knowledge, if Mr. Wenderoth did not gain in money, by these pioneer works; and as he was a very free contributor to the journals, had a wide European as well as American reputation, and was very frank in his communications; it is certain that, whether the world recognizes it or not, much of the valuable result now witnessed in photo-mechanical printing is due to his ingenuity and poorly requited labors. In his later years, our friend abandoned practical photography and devoted himself to his pencil and his experiments.

Space would fail to tell of the fertility of

Mr. Wenderoth's inventive mind, and of the variety of results to which it gave rise. So long as there was hope in carbon printing he held on to it; and, as one of the outcomes of it, he invented the argentotype, a carbon picture on glass, with a background of mat silver. As an example of his laborious patience—truly German—it may be related that the walls of his private working places were covered in close writing, by the square yard, with formulæ and results, most of them labored upon while the general run of workers were either recreating or asleep.

In pure art, Mr. Wenderoth produced some excellent pieces before he adopted photography; notably, "The Lion Hunt," a large painting full of exciting suggestions; the animals in it having been sketched from life, while enraged and feeding, at the Jardin Des Plantes. His "Battle of Gettysburg" is recognized as a remarkably fine and truthful painting. It was his most ambitious production; but, unfortunately for the artist, it did not receive, in certain quarters, the unqualified credit which was its due, because of his professional connection with photographic methods. This was an injustice, for no more use was made of photography in its production than is common to all oil paintings, in which, as in this case, portraiture is introduced.

A few days before Mr. Wenderoth's death, he sent for the writer, to hear what proved to be a dying statement concerning an invention just perfected, which was to be a last legacy to his family. Never was the old aphorism of "the ruling passion strong in death" more fully or more painfully exemplified. With the last glimmering of that powerful will, for which he was so noted, he fought his growing weakness most manfully; and, with thickened tongue and nearly inarticulate speech, but without one pause for rest, he rapidly described his last invention, its merits, and his expectations from it. It was in the line of photoelectrotyping, and notwithstanding his specimens had been prepared, and very full notes had been taken from his lips previously, he had to talk over his triumph, and inspire somebody to carry it forward. It was a painful scene; the once strong and

still confident man (his photographic friends will recognize the picture) grappling, in one last conflict, with physical weakness, that he might assert and communicate to those whom he would have take up his work, that will-power which had always sustained him.

But death, however delayed, takes small note at the last of human wills; and at a later visit, seeing every sign of approaching dissolution, I left the dying man—still laboring with his invention—promising, with more significance than he suspected, to see him the next day "if he wanted me."

Mr. Wenderoth for many years of his life was indifferent to Christian belief; but six years ago he became convinced of the claims of Christianity, and when past fifty-five made a public profession of his faith. One of his latest expressions to his family was an assurance of his entire trust in the Redeemer of men; a trust exemplified by his character while in the church. He leaves a wife and four children, the latter being the fruit of a former marriage.

W. C. T.

AMATEUR PHOTOGRAPHY AMONG THE ALPS.

BY PROFESSOR CHARLES F. HIMES, PH.D.

(Continued from page 89.)

THE first purely photographic matter demanding consideration, and upon the decision of which all else depended, was the character of the outfit. There seemed to be a preponderance of circumstances in favor of a sort of vest-pocket camera. small plates were to be focussed sharply, by the aid of a microscope, and the negatives to be capable of indefinite enlargement. Upon the whole, such an outfit would be most advantageous to the amateur tourist upon his first expedition. But a weakness for stereoscopic effect, which alone in so many cases gives the complete rendering of a picture, led to the acceptance of an offer, kindly made by a friend, of a stereoscopic camera for 5x8 plates, with six double backs, and supplied with Morrison Wideangle View Lenses. The camera had the additional recommendation that it had seen

service in similar expeditions, and had proved itself worthy, so that, in the press of other matters, it was taken at the last minute on faith without trial, almost without inspection. On general principles, it may be said to be risking too much to venture with an untried camera into untried The experience in this case in a measure reinforces this statement. A camera that has been tried in a dozen campaigns, and has never proved false, should not be displaced by the best in a friend's collection, endorsed with his very highest commendations, but about which nothing further is known. The tried camera may have its weak points, but these known are more than half provided against. A friend's camera may develop its weaknesses very unexpectedly, and it is the unexpected that generally occasions the trouble. Even the patient Alpine mule, that ordinarily seems absolutely inert, at times annoys by some trifling eccentricities largely because they are unanticipated. In packing the outfit for a foreign tour, not only convenience and safety are to be considered, but, as well, the inevitable custom-house inspections. Whilst upon the whole it is best to pack it all together, exception might be made in some cases for plates, especially exposed ones. These packed among the ordinary baggage, in moderate numbers, would not be likely to be disturbed even by the most conscientious custom-house official. The writer has never experienced any annoyance from this source, but the possibilities of annoyance at each frontier presented themselves as so great, that until the baggage has the hieroglyphics of the American inspector upon it on the return, there cannot be perfect freedom from anxiety upon this point. A very stout sole-leather packing-case, about a foot and a half high and a foot square, furnished with the camera, held everything photographic. A tin box, sliding tightly into the bottom, held eight dozen Carbutt A plates, and two dozen J. C. B. plates. On top of it were packed the camera, the filled double backs, two vulcanite developing-trays, developer, weighed packages of hypo, small ruby lantern, screw-driver, copper wire, gum bands, focussing cloth, etc. This was shipped with the other bag-

gage, stopping and starting with it at various points on the way from Antwerp to Lucerne, receiving the same usage at hotels and depots, and at the latter paying, in most cases, as is the rule of the country, as excessive baggage to the fraction of a pound. The charge for baggage, however, cannot be considered as excessive, and in most cases has a species of compensation in somewhat diminished charge for fare. The leather and tin did not form a sufficiently rigid combination. A light wooden box encased in leather would be far preferable. The leather exterior, however, gave it the appearance of a slightly overgrown English hat-box, and imparted an air of respectability to the party, which so impressed the average European customhouse official that he rapidly chalked everything within reach without awaiting an answer to the usual questions. But much as it may have gained in character in such cases, when it was seen and not handled, it lost among the baggage agents. By number one it was generally laid hold of with one hand, and as a small affair, but he usually ended by using all of two hands, frequently accompanied by words not to be found in reputable dictionaries, whilst number two, awaiting a hat-box, had his toes surprised by a smasher that made him bear the article no good will as he passed it on through the further ordeal of weighing, assorting, ticketing, etc. There was a species of entertainment in this, to be sure, perhaps, too, even a malicious sort of pleasure in spite of the vexation of spirit and anxiety for the contents of the box. There is no greater source of annoyance to the American traveller in Europe than the baggage nuisance. It is not the slight payment of money, for the amount finally demanded is frequently ridiculously trifling, considering all the pomp and circumstance involved in the transaction, but the loss of time, when every minute is golden with possibilities of pleasure and improvement, that vexes. The transferring, the weighing, the entries in the book, and upon the receipt, of weight, excess of weight, charges, number of pieces, are all done with a slow, dignified, imperturbable deliberation, even when the train is about to move, that verges

upon the exasperating. Occasionally the baggage reception will cease with some trunks unchecked, and the passenger has the option to remain behind with it until the next train, or entrust it to the care and honesty of the porter in charge of it. Where it is possible, therefore, a photographic outfit that can be carried readily in the handand taken into the cars, can be made to save at least half an hour at each station.

Arriving at Lucerne in the latter part of July, in the midst of showers, that for ten days had accompanied us with infrequent alternations of sunshine, the outlook for Swiss excursions was not very promising, especially as there were no indications of an immediate permanent change of weather. Accordingly, regarding the chances as much better for two weeks later, the photographic outfit was shipped as rapid freight, by rail, to Brieg at the foot of Simplon Pass, where it could be picked up on our way back from Italy, whither the journey was made by way of the Lake of Lucerne and the wonderful St. Gothard Railway and tunnel. After wandering about Italy, especially visiting Naples and Pompeii, and ascending Vesuvius twice, the whole peninsula seeming to be suffering from a prolonged drought, with large rivers dried up, and dust inches deep in the highways, we emerged again from the St. Gothard Tunnel, at Goschenen on the Swiss side, in the midst, apparently, of the same driving rain that had sent us to Italy. Taking a carriage over the Furka Pass to the Rhone Glacier, and diligence thence to Brieg, to pick up our baggage, if able to do nothing more, we were fortunate enough to strike the turn of the weather. l'assing through light snow-storms on the summit, the sun came out to stay before we reached Brieg, and lines of tourists that had been watching and waiting for fair weather signals, seemed to be converging toward the valley of the Visp and Zermatt. At Brieg the trunk was found, apparently all right, with fortunately an hour and half of time to spend in getting it out of the freight depot and on the train for Visp, most of which was used up in the transaction, but for the freight, storage, and all the annoying attention, the charge was exceedingly moderate. On the route from Andermatt, by way

of the Furka and the Rhone Glacier, were many views that were passed with regret, especially as travelling by private carriage seems not only best adapted to seeing, but also to photographing. Arrived at Visp early enough in the afternoon to make an exposure or two at this picturesque little earthquake-shaken and flooded village, lying at the entrance of the narrow valley leading up to Zermatt, the photographic trunk was carefully unpacked. It was here that the unexpected was encountered in huge proportions. Besides lesser damages, the camera front was found to be badly damaged, so that the lenses were not firmly held, and light leaked in at different points. Closer examination showed the damage, trifling enough at home, to be worse than at first supposed in this out-of-the-way place. Some boxes of plates gave the characteristic sound of broken glass when shaken. The resources of the village for repairs did not seem to be very great Altogether the outlook was very unpromising and lacking in inspiration. Whether to repack and ship for the steamer, or to spend the remaining few hours in attempts at repairs was the question to be decided promptly. The latter course was determined upon, and a tour of the village was at once made, to see what assistance it could render.

CARLISLE, PA.

SUMMER SCHOOL OF AMATEUR PHOTOGRAPHY.

SUMMER schools of science; of philosophy, and even of theology, have been projected, but it remained for the enterprising management of the growing mountain resort of Mountain Lake Park to discover the claims of amateur photography as a source of recreative study and practice at a summer resort. There is no branch of practical science that combines in as large a degree entertainment and profitable study and work. Even its simplest processes repay well. The eye and hand are trained, the judgment continually exercised, and patience and perseverance, under discouragements, often tested and developed. Whilst new fields of thought and investigation open up all around, the

tangible results of amateur photographic practice yield a gratification peculiarly their own. The school is intended chiefly to meet the wants of amateurs, and to encourage the pursuit of amateur photography. It will be under the direction of Prof. Charles F. Himes, one of the earliest amateurs in the country, and a teacher of science, who is thoroughly competent to make it a success. We have as yet no detailed programme, but learn that the exercises will include lectures of a general and popular character upon the history, theory, applications, and practice of photography, and instruction by lectures, and direction and supervision of practice by the students. Courses will be adapted to the disposition and time of different individuals. The various printing processes will likely constitute one course, and the wet-collodion process and gelatino-bromide dry-plate process each form separate courses. All necessary apparatus and chemicals for practice will be furnished by the Association.

Mountain Lake Park is a comparatively new name among the semi-religious, semi-educational summer resorts. It lies about midway between the fashionable resorts Oakland and Deer Park, on the main line of the Baltimore and Ohio Railroad, in the heart of the glade region, on the summit of the Alleghanies. It comprises about nine hundred acres, and the Little Youghioghemy River flows through it. It is said to be perfectly free from malaria, and to afford complete relief from hay fever. surroundings are just such as would call out the camera from its hidingplace, or send an order for a dry-plate outfit if none were on hand. wish the enterprise all success, and hope it may be but the forerunner of many similar undertakings.

My experience with home-made dry plates continues to be of the most satisfactory character. I am very confident that the time will come when professional photographers will generally manufacture their own plates. The only trouble about it is to get started.—Jay Densmore.

A NEW-YEAR GREETING FROM SUNNY ITALY.

MANY of our modern dry-plate workers do not know how much we are all indebted to a gentleman whose name we seldom hear now, for much-very much-of the success which has been attained by that great helper in photography, the dry plate. He was not only one of its earliest advocates, but a most diligent experimentalist up to the time when he suddenly dropped photography and the photographic magazine he published in Italy. We allude, as our older subscribers well know, to Signor Ottavio Baratti, of Ivrea, Italy. Signor Baratti, although now retired from our number, is still an ardent lover of our art, and a loyal amateur. He reads the PHILA-DELPHIA PHOTOGRAPHER regularly, and each year sends us a pleasant new-year We give below a fac-simile, greeting. photo-engraved, of his last one:

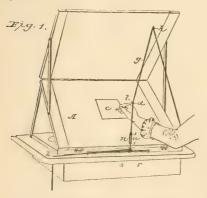
O very Happy New Year my dear friend. What the firm period of your Ditrial larges which is going to begin with the 1884 may that it the styre may make the the south of period more and much the bought and prosper more and much the bought and prosper more and much the good of hebrigaphicy I hope you do not give dip the place of wifeting Italy again this year, so that at last we can shake hands and fer each of the and inverse on our common topic of that described friend that despectation I work again to your a than the firm of the start of the start friend of the start find

We are sure that all who remember Sig. Baratti will join us in reciprocating his kind wishes.

A New Price List.—Messrs. Chas. Cooper & Co., 184 Worth Street, New York, have favored us with their price list for March, 1884, fuller than ever with photographic requisites. Every photographer should send for a copy.

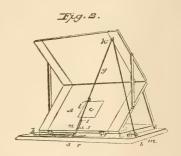
DENSMORE'S NEW RETOUCHING MACHINE.

ALL professional photographers are aware that one of the most important operations in connection with photographic portraiture is the retouching of the negative, and that to do it properly requires a certainty and delicacy of hand that are acquired only after laborious effort and prolonged experience by comparatively few. Skilled workmen in this department are difficult to obtain, because of their scarcity, even though the business of all galleries that aim to turn out only first-class work, is on a scale sufficiently large to justify the employment of professional retouchers; and as it is impossible for the proprietors to find time from the other numerous duties of the establishments to do all of such work unaided, it often becomes necessary to send negatives away from home to be retouched, which is not only risky, but unsatisfactory in many respects.



The accompanying cuts illustrate a new apparatus that is intended to put it in the power of anyone who understands a negative, to retouch it. The strokes of the pencil being produced automatically, it is only necessary to pass over those parts of the negative which require retouching, the pencil the operator is in the habit of using. As will readily be understood by the cuts, the motion of the pencil is produced by a cord, which connects the pencil with suitable mechanism that is operated by the foot of the retoucher. The strokes of the pencil are readily adjustable from infinitesimal fineness to any extent required, by simply

sliding the end of the cord along the vibrator at the side of the easel, shown in Fig. 2.



Having adjusted the cord to obtain a suitable touch, and regulated the rapidity of the pencil strokes by the motion of the foot, the operator guides the pencil over those parts of the negative he wishes retouched. It is sufficient to know what should be done to be in a position to do it. Experienced retouchers may also employ the machine with advantage, both on account of the fineness of execution and the rapidity of work.

The machine is the invention of a practical photographer, Mr. Jay Densmore, of Niles, Mich., and arrangements will soon be completed to place it upon the market.

A PROCESS-VENDER ON THE WAR-PATH.

THE following ambitious and pliable offer is given *verbatim*, free of charge. Look out for him.

CARTHAGE, Mo Feb 20 (84

DEAR SIR

I have a new process for enlarging Photos from smass Negatives, which has great advantages of the Solar Camera, first that there is no additional expence for instroments, and second that the work can be don in cloudy weather, and third that the prints by it are pasable without the work of an artist on them to finish up. My price for instructions is \$50.00 or if prefered will teach for \$25.00 binding the parties not to teach the process for the term of one year. If you have any idea that you would take

the proces (providing that it prove to you that it is what I claim) I will call on you shortly with specimens of the work. hoping to hear from you soon.

Lam

Respectfully
L. TAYLOR

Such words—to the wise—are sufficient to make them "shake" such a Taylor.

VARNISHING AND PRESERVING GELATINE NEGATIVES.

D. BACHRACH, JR.

My attention was called to an article in the February number of this journal on this subject, and I will give what little experience I have had, and my conclusions thereon, in the hope that it may lead to a full elucidation of the matter. Some may think the subject of little moment, but it becomes an important question, even to an establishment like ours, which uses but a limited number of gelatine plates (five-sixths of our negatives as yet being made with collodion).

We usually have about thirty thousand negatives on hand, stored away in boxes, and at present perhaps fifteen hundred are gelatine plates—some of them dating back to the time when Mr. Carbutt first introduced the manufacture of dry plates into this country. Now, at least three hundred of this number are negatives which we would consider it a very serious matter to lose, and how must it be with those who use gelatine plates altogether?

If anyone will varnish a gelatine negative simply with the usual negative varnishes—upon which retouching can be done without grinding the surface—he can make all his retouching useless by simply allowing a few drops of water to fall on the surface, or by allowing his hand to rest on it while perspiring or moist. The effect is at once seen in semi-opaque spots, which show badly in printing, and can only be got rid of by revarnishing, thus making the labor in vain. Retouching direct on the surface of the gelatine, and then varnishing, would obviate this, but most retouchers do not find it a desirable surface by itself.

But there is another aspect to this case.

A surface so easily affected by moisture is not safe against other deleterious causes. The reason for this is obvious. The varnish mostly used is composed of gum sandarac, alcohol, and sufficient gum turpentine to give it a soft, yielding surface, causing the pencil to take to it readily. From considerable experience with varnishes, I find this one of the best for retouching purposes, and the one most generally in use. The weak spot in it for gelatine plates is the gum turpentine. It may be asked, Why not use shellac entirely? True, this varnish does not allow moisture to penetrate direct, if thick enough, but it is the poorest of all varnishes for practical use, because the surface is so hard as to require grinding-a most pernicious practice, making collodion plates hard and slow enough in printing, but still worse for a gelatine negative of good strength. A further objection is that from its filmy, contractile nature, should the negative ever be exposed to a continued damp atmosphere, such as in basements or cellars, it would cause them to peel off, as in stripping plates. I have often witnessed this effect on collodion plates; and I have also noticed that negative films varnished with shellac are the soonest eaten off in the acid dish, while those varnished with sandarac hold on much longer. In fact, shellac and mastic varnishes have the least stability of any.

Now to the remedy, and a perfect safeguard for gelatine negatives. I have found that the original method of first coating the plate with plain collodion, and then varnishing, to be a perfect and reliable protection. We use a collodion containing six grains to the ounce of gun cotton, and about thirty drops of castor oil to the pound. Our varnish is composed of two ounces of sandarac, half ounce of the lightest orange lac to one pint of alcohol; to which one drachm of castor oil is added, instead of using gum turpentine, to give a tooth to the pencil. Bleached lac may be used, but it does not come regular in quality, and if very old is insoluble. The color given by the amount of orange lac used is not objectionable, but those who object could use sandarac alone, though it does not dry as nicely or with as little heat as when a little

lac is used with it. It will be seen that we here have a varnish on a film of collodion covering the gelatine; and I have found it to stand immersion in water a long time without moisture being absorbed by it. I would warn others, however, that no amount of protection can make a plate that has been treated with mercurial salts safe against deterioration; the most of them will go. I have found several negatives made in 1881, developed with oxalate and thoroughly washed free from hypo, that have become much weaker. They were not intensified, were protected with varnish, and kept in a dry place. The later ones have apparently not been affected as yet, and it is also somewhat premature to decide as to the permanence of gelatine negatives. We have not been convinced yet that it will pay to throw our bath into the refiner's hands, and from present appearances, are not likely to be in a hurry in the matter, particularly as our "old fogyism" in this matter pleases our customers, and saves us about thirty dollars a month.

AN ENGRAVING DIAMOND.

WE append a drawing of a little tool recently invented and introduced for the use of professional photographers and amateurs, the purpose of which is to supply a long-felt want. Many a valuable negative has been lost because no system adopted by the photographer has existed for numbering the same. This little engraving diamond, the invention of a Philadelphia amateur photographer, will now prevent loss in this direction, if its use is adopted. It is, in form



and size, something like a short stylographic pen, and consists of a metal handle about five inches long, at the end of which a diamond is permanently set for the purpose of writing and figuring upon glass. We are assured by the manufacturer that it will even write on steel. The best about this, of course, is the diamond, but there are other points to be considered in its use, and suggestions as to whom it is useful are to be seen in the advertisement. It is neatly and strongly made, and will soon pay for itself in the increased orders that it will save and secure to those who adopt its use.

SOCIETY GOSSIP.

Photographic Society of Philadelphia.—Minutes of the regular meeting held Wednesday evening, March 5, 1884. The President, Mr. Joseph W. Bates, in the Chair. Thirty-seven members and seven visitors were present.

The minutes of the last regular meeting were read and approved.

Mr. Coates moved that the matter of a new room be left to the Executive Committee, with power to rent any room they might think suitable for a period of one year, with the privilege of renewal. Adopted.

The Executive Committee reported that Mr. Browne's "History of the Photographic Society of Philadelphia" had been published in pamphlet form as ordered, and was ready for distribution to the members. They also reported that a circular letter had been sent to each member asking his opinion (1) as to the advisability of raising the annual dues, with a view to enable the Society to procure a room more suited to its present wants, and (2) as to the amount of increase desirable. As many of the members were decidedly opposed to an increase of dues, and as no room in all respects desirable was to be obtained at the present time, the Committee thought it best to continue to hold the meetings at the Franklin Institute for the balance of the season, hoping in a short time to be able to announce having obtained a suitable room.

Messrs. Charles R. Colwell, Anthony W. Robinson, and George Hanmer Croughton were elected active members of the Society

Three new members were proposed for election at the next meeting.

Letters of resignation were received from Dr. J. H. Warrington and Mr. W. E. Dobbins, and also from Mr. Charles R. Pancoast, who tendered his resignation as Secretary on account of his prolonged absence in India.

On motion, these resignations were accepted, and Mr. Robert S. Redfield was elected Secretary.

The questions in the box were as follows:

1. How would a soapstone sink answer for washing prints?

It was thought that it would answer very well, but not any better than enamelled iron, which is not so expensive, and can be made any size.

2. What is the best method of numbering dry plate negatives?

It was suggested to use a writing diamond.

3. Has any member tried the new formula for development given by Mr. Cooper at the Exhibition of Eastman dry-plate work last month? If so, will he tell us how he liked its use and results?

One member answered that he had developed thirty negatives with it. He thought that it did not give enough density, but that by its use a shorter exposure might perhaps be allowed. He said that it would stain the fingers, although Mr. Cooper thought it would not.

4. Is it necessary to varnish dry-plate negatives, and why?

It was thought well to varnish, to protect them against silver stains from the sensitive paper, and to stop the absorbent power of the gelatine film. It was suggested first to coat the negative with plain collodion, and afterwards to varnish it.

5. What is the cause of a plate giving a thin result, when in the normal amount of developer it comes up very slowly, and when taken from the developer the image is very plainly seen on the reverse side? Is it the fault of the plate?

It was thought that this might result from either over-exposure, or over-development, or it might come from a thinly coated plate.

6. Does soaking a gelatine plate in alum solution of any kind, either before or after fixing, prevent it being subsequently intensified in any way?

It was the general opinion that it did not, except so far that if put in the alum after

fixing it would render it difficult to wash out all the hypo, and then there would be much danger of stains in attempting to intensify.

Copies of the following foreign journals were received from Mr. Charles R. Pancoast: Nature, Bulletin Association Belge de Photographie, Liesegang's Photographisches Archiv, Photographisches Wochenblatt, for the presentation of which the thanks of the Society were rendered.

Mr. Rau showed some very fine large photographs of Western scenery, taken by Mr. W. H. Jackson, of Denver, mostly on plates 18 x 22. He also read a letter from Mr. Jackson, in which he said, "The views were all taken within the last two seasons. I develop entirely with oxalate and iron; have tried soda and sulphite developer, and while I can find no fault with it, I can see no advantage over my old stand-by. Three months after exposure is about the longest time I have allowed plates to remain without development. Some of the plates used during the past season have been on hand a year before exposure. I saw no great depreciation except the greater depth of the insensitive band around the edges, where they have been in contact with the pasteboard rims. In some instances this has been so great that only a 16 x 20 could be had from an 18 x 22 plate. I have never developed in the field, but on my trip through Mexico this spring, I shall make arrangements for developing most of my plates. The Mexican Central Railway Co. provide me with a fitted-up car for working in, so I can do this very easily. The instantaneous picture of Old Faithful was made with the back lens of a No. 4 Dallmeyer Wide-angle Landscape, largest stop and drop shutter."

Mr. Coates then offered the following amendments to the By-Laws, which he desired should be acted upon at the next meeting:

Article I., Section 1, to be amended to read, "All nominations for membership must be in writing, endorsed by two members of the Society. The names shall be referred to the Committee on Election of Members, who shall examine into the fitness of the candidate, and report at the next

stated meeting of the Society their recommendations in the case. At the meeting, in case of a favorable report of the committee, the Secretary may be directed to cast one ballot for the Society."

Article X., Section 1, to be amended so as to have added to the standing committees a Committee on Election of Members.

SAMUEL CASTNER, JR., Secretary pro tem.

PHILADELPHIA AMATEUR PHOTOGRAPHIC CLUB.—A special meeting of this Club was held at the Club Room, 907 Filbert Street, on Friday evening, March 7th. Mr. H. L. Roberts in the Chair.

Report of Committee on Constitution and By-laws received, and Constitution and Bylaws adopted, with few changes.

On motion, meeting went into election of officers, with the following result:

President.-Mr. H. L. Roberts.

Vice-President.—Mr. Arthur P. Lewis. Secretary.—Mr. George W. Pearson.

Treasurer .- Mr. J. Frank Gaskill.

Executive Committee.—Messrs. H. L. Roberts, W. West Randall, F. A. Cunningham, Edward Cohen, W. A. Haines.

On motion, it was resolved that dues should be collected quarterly, in advance.

On motion, it was resolved that the third Monday in each month be adopted as the regular meeting night.

On motion, it was resolved that a vote of thanks be tendered to Messrs. W. H. Wamlsley & Co., James W. Queen & Co., John Carbutt, Edward Cohen, W. A. Haines, and W. West Randall, for fixtures and furniture donated to "dark" and club rooms.

On motion, meeting adjourned at 11 P.M.

G. W. PEARSON,
Secretary.

ROCHESTER PHOTOGRAPHIC ASSOCIATION.

Regular meeting, Monday evening February 11, 1884. The President, Mr. J. M. Fox, in the Chair.

The minutes of last meeting were read and approved.

This meeting was largely attended, many of the newly elected members being present. The prospect of more applications from among the amateurs seems favorable. The Constitution and By-laws of the Association having been left in an unfinished condition, several amendments proposed at the last meeting came up for final adoption. The clause relating to "associate members" caused considerable discussion, thereby delaying the regular business until a rather late hour.

The subjects from the Question Box were finally presented by Mr. S. Miller, Chairman of that Committee. The questions were as follows:

- 1. Why is albumen paper more difficult to work in winter than in summer, and what is the cause of the albumen leaving the paper after fixing?
- 2. Is it injurious to dry plates to remain long in the hyposulphite solution? What would be the result?
- 3. How long should gelatine plates be washed before and after developing before fixing?
- 4. Is it better to retouch gelatine negatives before or after varnishing, and what plan will give the best surface for retouching?

Mr. Miller said that he thought printers paid too little attention to the demands of the paper to insure the best results, in working albumen paper. In winter especially, the temperature of the room in which the silvering is done, as well as that of the water and chemicals used in the operation, is liable to be rather low. Now the temperature of the silver bath for positive printing, and that of the room in which the work is done, should not be less than 60° F. Printers should regulate the temperature of all solutions, Try and work uniformly. It is not right to take prints from very cold water in which they were washed and place them in a hot toning bath. Albumen paper newly made is more liable to soften and leave the paper after such treatment, or to show woolliness. Any extreme in the temperature should be avoided.

The President: At what stage of the operation does the albumen leave the paper?

Mr. Brown was of the opinion that it occurred in the fixing. He thought the hyposulphite of soda should not be made too strong, nor used very cold.

The President exhibited a print which

was made on a ten-grain silver bath. The albumen surface was good; there was no sign of woolliness.

Mr. Brown asked how long the paper was silvered.

The President: This paper was floated three minutes; it was dried thoroughly and fumed half an hour. This is only an experiment, to show that the albumen has not left the paper.

Mr. Nelson preferred his silver bath made alkaline.

Mr. Brown recommended using silver bath fifty or fifty-five grains to the ounce, with the addition of a little alcohol. He prefers it to test neutral or very slightly acid. Add warm water to the first washings, and use the toning bath also warm.

Regarding the second question, Mr. Miller said that he did not know how long a gelatine plate could be left in the hypo before it would spoil. He had left a negative in the fixing bath over night by mistake, still it came out all right; the bath was made rather weak, however. He would not advise leaving plates in the fixing solution longer than necessary to fix them properly. If the bath is old it becomes charged with impurities, which cause black spots on the surface of the plate. While the negative is fixing it is a good plan to move it occasionally, or use an upright fixing bath.

Third question. Mr. Miller said that it was not necessary to wash plates before developing; still he prefers to do so. The developer, flows more evenly over the plate than if it was dry, and, moreover, there is less tendency to form bubbles. The plate should be thoroughly washed before placing in the fixing bath, otherwise pyro would be carried into the bath. Lay the plate down under the tap and let it have a good washing before fixing.

Fourth question. Mr. Miller said there are many advantages in retouching gelatine negatives before varnishing. An extremely freckled face, for instance, may be worked tolerably well on the gelatine surface, and then finished after varnishing. Work can also be done on copies of old pictures; spots and streaks cut out, and many imperfections removed which could not be so well done after the negative is

varnished. It is the best plan to dilute the ordinary negative varnish, which is too heavy for gelatine plates. The usual surface caused by rubbing the varnish on the gelatine surface with pumice-stone is a good plan.

The thanks of the Association were voted to Messrs. Anthony for the *Bulletin*, and to Mrs. J. H. Fitzgibbon for the *St. Louis Photographer*.

The meeting then adjourned.

W. J. LEE, Secretary.

Association of Operative Photographers of New York.—The regular meeting of the Association was held at their rooms, 392 Bowery, on March 5, 1884. President Schaidner in the Chair.

Minutes of last meeting read, and, after several alterations, approved. Correspondence read.

Received, with thanks, the British Journal for February 8th and 15th; Photographic News for February 8th and 15th; St. Louis Photographer for January, and PHILADELPHIA PHOTOGRAPHER for March.

Mr. Jahr, on behalf of the President, spoke of the subject of lighting the developing room; he did not wish to say much, as he intends to read a paper before the Association at the next discussion meeting, so that he only made a few passing remarks.

A member said that he had been using a new plate, the Seed plate, and considered it the most sensitive he had ever used. It comes out perfectly clear. He had heard a great deal of talk about the best kind of developer. The English, he found, had gone back to oxalate; he himself had gone back to pyro.

Mr. Jahr: I will give pyro the palm, for I think it is the best; I prefer a yellowish-green, and can get it every time with pyro. I always lay my plates on a piece of white paper to see if they are clear.

A Member: It seems to me that, if some plates are put in a solution of alum, they look more like wet plates.

Mr. Jahr: Some of these plates lose density, I think. You want fresh hypo and fix well and clear, not muddy. Sometimes

plates are taken out as being fixed when they are not.

Mr. Schaidner had had trouble from old hypo, and thought it caused frilling. When he used fresh hypo there was no frilling.

Mr. Jahr: Perhaps the heat of the solution had something to do with it. I wish you would see and let us know at next meeting.

A Member: The trouble has always been to get good plates. I think the Seed plate is very reliable. He had occasion to use a few to-day, and they came out very fine.

Mr. Jahr: Speaking of white drapery, I was with a friend of mine, who said he could not get white drapery with a dry plate. I made some plates to show him that he could get good whites. You want to use less pyro than the formula. The plates ought to stand the simplest developer.

A member said that he found the oxalate developer sometimes gave a perfect relief

picture.

Mr. Jahr: What would be the standing of photographers using dry plates and those using wet plates?

A Member: I only use them when it is absolutely necessary. With a wet plate I know just what I have; with a dry plate it is not as easy every day to turn out good negatives as with wet plates?

Mr. Jahr: I don't think in a few years wet plates will be used at all.

A Member: About three years, ago Mr. Notman used them altogether, and, not having any experience with them, passed many a sleepless night. If you can get a good plate, rich in silver, you can make a good negative. Some manufacturers are now selling cheap plates; they are weak in silver, and will not make good work.

A Member: The emulsion manufacturers are making less body in the plates than heretofore; the thickness of the plate and the density have something to do with it.

Mr. Jahr: There are many gentlemen who claim to make as good negatives with dry plates as with the wet plates.

A Member: The lighting of the sitter will not stand good with both plates; we have not curtains in our skylight. There are so many different opinions. You want a more diffused light for dry plates, and it is a mistake to look at the lighting through the ground-glass. It is all a matter of habit.

A Member: Don't you think you can get a better idea in regard to timing by looking through the ground-glass?

Mr. Jahr will present a paper on the lighting of the dark-room, to be read at the next discussion meeting.

The annual meeting of the Association took place at 392 Bowery, on March 19th, for the election of officers for the ensuing year, which resulted as follows:

President.—Mr. A. H. Atwood.
Vice-President.—Mr. O. Buehler.
Secretary.—Mr. T. W. Power.
Treasurer.—Mr. J. Heckel.
Figureial Secretary.—Mr. A. Mild

Financial Secretary. — Mr. A. Mildenberger.

Trustees.—Messrs. J. Street, G. C. Connor, D. W. Fields.

T. W. Power, Secretary.

Photographic Section of the American Institute.—At the meeting of the Photographic Section of the American Institute in New York, on March 4th, the subject of the evening was "Photography in its Relation to the Useful Arts," by George G. Rockwood, of Union Square.

Before proceeding to the subject announced, Mr. Rockwood called the attention of the meeting to a letter which he had received from Cleveland, concerning the "new and wonderful invention" in photography, a report of which had recently been sent throughout the country by telegraph, and which it was alleged would revolutionize the art. The alleged invention, according to Mr. Rockwood's correspondent, was a method of copying pictures by the electric light, but was not quite perfected yet in the way of portraiture. "In short," said Mr. Rockwood, "it was an attempt to do that which had been done for years by Van der Wyde, of London, Liebert, of Paris, and my friend, Mr. Kurtz, of this city, for portraiture, and for nearly two years in my own establishment for copying." Mr. Rockwood then exhibited and explained an invention of his own for decorating china or stoneware.

Decoration of Chinaware by Photography.-" What is known as printed ware, formerly in common use, and of late being introduced again, is decorated by a process of 'offsets,' so to speak, from impressions made from engraved copper plates. The design for a dinner set is first drawn by an artist, and then engraved in itaglio on large copper plates costing from ten to one hundred guineas, depending, of course, upon the elaborateness of the design. When these copper plates are engraved they are filled with a mineral pigment ink, of any color desired for the design. Soft paper, made for the purpose, is pressed upon the plate, and the ink printed on the paper practically in the same manner as in ordinary copperplate printing. These sheets are trimmed and cut into the desired forms, and then applied to the ware while in the 'bisque' or unglazed condition. The paper is then removed, leaving the picture or design upon the dish, after which the 'glaze' is applied.

"It occurred to me that by reversing the action of our photo-engraving or etching process these expensive plates could be produced by our art; so, securing a 'line subject,' I first made a negative and from it a positive on glass. I then coated a smooth sheet of zinc with bichromated albumen, and exposed the plate under the positive. It is, of course, apparent that when inked up, and the parts unaffected by the light washed off by water, the lines of the image will be bare instead of being covered, as when printed with a negative. When etched, the lines only are attacked, and we have an image in itaglio, or below the surface, instead of relief. This plate upon being filled with pigmented ink, served the purpose in every way as with the engraved plates. As zinc would not retain heat-a necessary condition in a stage of the printing-I tried the same experiment with a copper plate, and secured, at a trifing expense, very delicate designs, which would have cost a large sum to engrave. The teaplate which I exhibit here to-night was made from a zinc etching. Any gentleman desirous of experimenting in this line will be given all the information desired, as I have no idea of patenting the process."

Mr. Rockwood exhibited a tea-plate with a humorous design, and also the zinc plate from which the picture was printed.

Dark-room Illumination. — Mr. Rockwood announced that, with Mr. Dellac, his associate under the skylight, he had made a series of experiments in dark-room illumination, with a view to confirm, if possible, the experiments which have been made by a number of gentlemen in England, and which have been reported in the English journals, concerning the uses of various colored glasses, to wit: red, green, orange, and yellow, separately, together, and with ground-glass. His experiments were made with a series of plates of extraordinary sensitiveness, registering twenty-five on the Werneke Sensitometer, the most sensitive he had ever seen without fog. With a Vogel Photometer placed two feet from the lantern, he exposed strips of the same plate to the light of a kerosene lamp for two minutes, with the following results:

Ruby with ground glass, no image.

Ruby alone, a faint image of No. 1.

Orange, green, and ground-glass, a little stronger image of No. 1.

Orange and green without ground-glass, No. 2.

Orange and ground, No. 3.

Orange alone, No. 4.

Green alone, No. 5.

Green and ground, No. 4.

His conclusion, therefore, was that a lantern covered with orange, green, and ground-glass was entirely safe with very sensitive plates. The color of the light is very agreeable to the eye and gives much better illumination than the ruby. It has none of the irritating qualities which the ruby light possesses to some eyes. It will be noticed that the use of ground-glass, while interfering but little with the illumination, added much to the safety of the light.

Messrs. Charles Wager Hull, Whitney, and others then favored the audience with reminiscences of daguerrotyping, photography, etc., all of which was interesting. Mr. Newton, the Chairman, spoke of the "silver wedding," or twenty-fifth anniversary of the Philadelphia sister society, which had claimed the earliest organization as a

photographic society in this country. Mr. Hull said that he had dates and documents which he alleged antedated the Philadelphia Society, and claimed for the present New York Society—not always with the American Institute—an earlier organization by some years.

THE photographers of the State of Illinois have organized themselves into a Society with fine prospects ahead, and the following staff of officers were elected:

President .- Mr. Joshua Smith.

Vice-Presidents.—Messrs. H. Rocher, J. K. Stevens, and Prof. L. M. Melander.

Secretary .- Mr. G. W. Gentile.

We expect now a great war upon low prices, and wish success to the new organization in everything that will pertain to the growth and honor of photography.

THE MULTIPLICATION OF SOCIETIES .-Photographic societies seem to be springing up all over the country, and presently we shall not only have an increased number of local societies, but also a State organization in every State in the Union. We do not know that anything need be done about it if they will all help us to do what they can to raise prices. We are sure that good will result from it. wish prosperity and success to every undertaking of this kind, and hope that when each one has a good Constitution that there will be no lag in the work that will be done. We are prepared to publish a weekly magazine for the accommodation of all business that comes. Do not fear but that the PHILADELPHIA PHOTOGRAPHER will keep abreast of the times, and stand up to all its requirements.

Dr. Stolze gives, in the Wochenblatt, a method for cleaning zinc or tin vessels, which are being used more and more in photographic establishments. For this purpose he used protochloride of tin. The protochloride of tin is dissolved in water to which sufficient fine and is added to form a rather firm paste, which is to be spread on a cloth and rubbed over the article to be cleaned. The surface soon becomes bright, even when it is much oxidized. Finish with a shanmy as for silver.

PERTAINING TO THE



STILL the bells are ringing in Cincinnati, and now the sunshine has come, we look for immense progress in matters pertaining to the next Convention. Only think, that in about four months from the time you see these pages the Convention will open. The Secretary will early make himself heard again; official invitations will be given presently. They will be too late to secure foreign representation, but we can get along. We hope that the President will soon let us have his views on the subject, and that things will move along swimmingly and prosperously.

New York, March 13, 1884.

EDITOR PHILADELPHIA PHOTOGRAPHER.

DEAR SIR: One of the most interesting and useful features of the exhibition of the P. A. of A. at Cincinnati would be a collection of English landscape photographs. I would respectfully suggest to the Executive Committee that invitations be sent to the leading English photographers to favor us with specimens of their work. The same to be transported to and from the Cincinnati Convention at the expense of the P. A. of A. Respectfully,

LAFAYETTE W. SEAVEY.

"Ho! FOR CINCINNATI."

My first subject will be the Highland House. This is the finest resort in the city, and when you take the cars that convey you to the Highland House, you ascend an elevated road about three hundred feet long, and when you reach the top of the hill you will find this the best place to make views. Highland House, which stands on the brow of the hill, just below the old Conserva-

tory building, and in sight of Eden Park, is a place of universal attraction to the visitors to Cincinnati. A bird's-eye view of the city shows it surrounded on the east, north, and west by prominent and beautiful hills, and washed on the south by the finest of our western rivers.

No one desiring to see the sights of the city should fail to enter it, and any member of the fraternity who wishes to take home some fine views of Cincinnati, will do well to come prepared, and with his camera make a bold stand on the Hill, and take a view of the city. After that, turn your camera to the left, and here is another grand opportunity; across the river lie the cities of Newport and Covington and the surrounding hills, while below we have another fine view of the suspension bridge, and after we get through with the city we gather our gripsack and take the cars for Eden Park There the lovers of art will find some of the most magnificent places to take views, and will be well paid for their trouble.

This park is the most extensive and best improved of the parks, being two hundred and six acres in area and all laid out except about twenty acres The following are the principal attractions of Eden Park: its beautiful scenery, its fine drives, its large and splendid reservoirs, which furnish the principal part of the water supply of the city.

Now we return to the attractions of Highland House in the evening, when it is all ablaze with lights, and the bustle of the throngs that assemble there. To those who have never visited this resort in the evening it will be a grand treat, and they can go home saying that they were well paid for their visit.

Now I hope the brethren will do all they can to make this the grandest Convention ever held. They must remember that they have one who is not asleep, but wide awake, and doing his utmost to make it a success, but it also depends upon the fraternity to do their share also. I hope they all will arouse themselves and see that the Convention is of more importance than merely to meet one another, for here we can compare notes, listen to great men, and learn something that we never dreamed of.

So once more I call upon the brethren to up and onward to Cincinnati.

Yours fraternally, LEO WEINGARTNER, Secretary, P. A. of A.

OUR PICTURE.

NINE examples of the celebrated work of Messrs. Gilbert & Bacon, Philadelphia, are given this month in the shape of a mosaic print, each one suggesting material to our readers for thought and practice. Having carte blanche with a generous assortment offered us by these gentlemen, we have selected as great a variety of pose and subject as we could. Most of the ladies are actresses and a list of them is appended below. It is true a photographer who has the advantage of such subjects should be expected to make superior work, for his models, understanding, sympathize with him and help him through it all. At the same time, there is evidence here of excellent taste in the choice of accessories, artistic knowledge in the arrangement and lighting of the figures of no mean quality. We commend these studies to our readers because by showing them we are enabled to give as many in one issue of our Magazine as we can in nine months, or nearly a whole volume, when we confine ourselves to the old plan of giving but one picture each month. Next month, however, we shall vary the style again, and present a beautiful child-group from one of our celebrated western photographers. This will be followed by other fine studies, chosen with the idea of making our twenty-first volume, pictorially, the most splendid, as well as the most varied, in subject and style of any that we have yet published. Some other gems are in preparation by celebrated photographers. Those who desire can yet secure the back numbers for this year, although the sets are going rapidly.

1. 2. 3.

Madame Rhea. Jeffries Lewis. Madame Modjeska.
4. 5. 6.

Madame Rhea. Madame Modjeska. Kate Forsyth.
7. 8. 9.

Lizzie Harold. Annie Pixley. Rose Leigh.

Our pictures were printed us usual upon the paper imported for us by Mr. G. Gennert, 105 Williams Street, New York.

A DISCUSSION ON PRICES.

(Continued from page 92.)

III.—To be Continued until there is a Reformation.

A SERMON ON THE SUBJECT .- Our call to the craft, last month, has brought us enough matter to fill our magazine for all the rest of the year. If we could so accomplish what we desire in the matter of prices, it would be worth while to print nothing else but material on this subject. The fact that we have had so many responses to our request for price-list, etc., encourages us to believe that some, at least, have faith in our efforts, and desire to express it. It is this kind of faith that we all want; and in view of this fact, we propose now to take the rostrum, and preach a sermon on the subject of better prices. Our text will be found in one of the letters alluded to above.

March 4, 1884.

DEAR SIR: Enclosed please find our We have only been here in price-list. business about one year, and have been trying to keep up without doing club work as nearly all do; but find it very hard. We do not, even now, employ any canvassers for club work, as some of the leading firms in B---- do, offering cabinets as low as two dollars and a half and three dollars per dozen. The great question with us now is, shall we do as others do and exist, or shall we be still, and finally find out that we must give up in despair? We have felt all along that such work must have an end, and that, sooner or later, good work at fair prices must triumph; but we are about discouraged. We are glad to see the journal taking up the matter, but do not see much chance for recovery.

Truly your well-wisher,

We gather from this text, a wail which is sounding from one end of the land to the other. The writers are sufferers, not from the prices received by them personally, but from that which is undermining prices generally; namely, the photographers who practise cutting and making work at clubrates. This practice seems to be one of the growing exils, and bardest things to over-

come in our present undertaking; but it is by no means the worst evil. We believe that club-work will presently surfeit the public with photographs, and then there will be quite a dearth in the business. During that dearth, the club-work makers will have to step down and out, since they will have saved nothing to live upon until better times come. Those who have a little money, and can hold out, will still come out first best, if they will keep their prices and have faith. We have seen things work this way in other businesses, and do not believe photography will be an exception. Good work does not bring all the trade. It is the desire for pictures that stimulates it likewise. In substantiation of what we have suggested, we will relate two or three conversations had recently with photographers who are getting first-class prices. Those who can read between the lines will not need a long dissertation from us, but from these conversations will see what they mean at once, and understand them.

The first was had with Mr. Leon Van Loo, of Cincinnati, Ohio.

"What do you get for photographs, Mr. Van Loo?"

"Fifteen dollars per dozen for cabinets, and seven dollars for cards."

"What is it, do you think, that induces some photographers to reduce their prices so terribly?"

"Want. A time of depression comes, and the photographer, having no means to live on while he waits for better times, reduces his prices—the last resource of the dying man."

"Why do you think some photographers work for less than their work is worth?"

"They don't want to raise their prices; they get scared at prosperity; they have been accustomed to living from hand to mouth, and are afraid to do better."

"If they get enough to eat, and support their families, what more do they want?"

"Why, a photographer should always improve himself in order to be able to improve his work. He should make money and spend it in reading, travel, buying and studying works of art, and experimenting toward the improvement of the quality of his work."

"Do you think there is much hope of a better state of affairs coming to pass for even the smaller photographers?"

"Certainly, to a degree. If the larger ones would set the example, the rest would be improved, as is the case in law, medicine, and so on."

"What is the best way to overcome the trouble?"

"Individual effort on the part of those who have individuality about them."

"The small and obscure photographer cannot always have opportunity to study the example of others; what is he to do?"

"Save up a little, and then go at it, and hold out until he wins. Let him take trouble to make himself respected by his patrons. Gain their confidence. It is easy enough for a photographer to let his customers see that he is interested in them. will give you an example from my own practice. All the proofs from my negatives are sent to me; as I get good prices, I usually make two or three of the subject at the first interview. Then, when the proofs come to me, I pass upon them, tear off the corner of the one that I consider the best; and when they are all shown by my attendant, it is suggested to the customer that the one with the corner off is considered the best by Mr. Van Loo. Nine cases out of ten it will be the one selected."

"How else would you suggest that photographers may secure the respect of their patrons?"

"Form principles and rules in business, and then stick to them. Include good prices. Then you can mould your subjects as you will, and your business will be an unmolested pleasure—If the photographer gets discouraged, then down goes the quality of the work, to be followed by lower prices."

"You have your share of cranky customers with the rest; how do you manage them?"

"I will give you one example. It is of the individual who knows best how he or she should be posed. In several instances I have submitted to the wish of such parties, and (opening his desk), I have here my illustrations for a lecture. Here is a picture of a woman who wished her portrait taken

according to her own ideas. I followed her desire, and, as you see, made a botch of it. The next picture is my idea of how she should be taken. You see the difference? Here is another twain, and another, all teaching in the same direction. Now when I have a customer who desires to dictate how a pose is to be made, I get out the illustrations and deliver my lecture; and I have but little more trouble. I use the head-rest when I wish to, and I make a profile when I think it is right; and sometimes I am even arbitrary enough to direct the size which shall be chosen. For example, you saw the young lady who just left? She was sent by her parents to engage for a sitting of a group this afternoon. Cabinet size was preferred; but soon I persuaded the young lady that what her parents wanted was not a cabinet group, but a twenty-dollar size for framing. It was for a birthday present for papa, and certainly mamma would not want a tiny picture that could not be framed. You see," said Mr. Van Loo, turning to us, "there was no choking at the price. They preferred an artistic picture to a cabiuet size, even at a greater price."

Leaving Mr. Van Loo, we proceeded to the studio of his neighbor, Mr. J. Landy, and the following conversation ensued:

"Mr. Landy, what are your prices for cabinets?"

"For cabinets, ten dollars per dozen, and six dollars per half dozen; cards, five dollars per dozen; children, seven dollars per dozen, and five dollars for six."

"What argument do you use in maintaining such prices?"

"If I feel that I am paid for my work, I can go about my duties with much more interest than those who do not get paid for what they do. I really give my customers back in extra attention and quality of work all that they pay for. As a rule, they understand and appreciate it."

"You are aware of the fact that you are getting better prices than photographers generally over the country. Why is it? Do you suppose that all cannot do as you do?"

"They can. But, first, they must have respect for themselves and their business. Low prices bring low spirits, and low spirits

produce a low quality of work. Resultruin. Some photographers get scared to death when they see (as you can see within one block of my establishment) cabinet photographs sold at five cents. It is true they are copies, and copies of very bad work too; but some thoughtless photographers, believing that they can make a dozen pictures to cost them no more than the fivecent picture costs its manufacturer by the thousand, suddenly grow conscientious, and feel that they are making too much money! Reduction and ruin follow each other quickly. In no profession can a man who is illy paid put himself in his work, make it give good evidence of his individuality, thought, and effort; in fact, make it look like himself. He gets cross, surly, and sick. Nothing has advanced in cost of production like photographs. Each year portraits cost more to make than they did the year before. A photographer wants to take a bath occasionally, and sometimes a square meal. Two dollars and a half a dozen won't permit him to do so."

"Will you give me an instance or two of your experience with some of your patrons?"
"Yes. The other day a newly married couple came to me, saying, 'Good morning, Mr. Landy. We have just been married by the Archbishop, and we want you to take great pains with our pictures.' I took pains, charged accordingly, and no complaint was made."

"Have you had much trouble in reaching the enviable height which you hold in our profession?"

"Yes; I have. There is one thing that I became fully convinced of a number of years ago, namely, that the sincere artists in our profession are the worst paid men in it, and degraded prices are what degrades them."

"What has been the result of this effort on your part?"

e Success, fume, good home, comfort; the pleasure of spending time with a good subject when I get it, without the fear of losing bread and butter by it. Why, I spent a great deal of time on my set of The "Seven Ages of Man." They cost me lots of work and thought; but I could afford it. I had enough means to invest the time, and, as a result, I obtained a great deal more profit

than I would if I had adhered simply to portraiture. I had customers come here the other day from St. Louis. They had paid three dollars a dozen for their pictures, and brought them in to me to first see them, and then threw them away. I then took negatives of them, and had the pleasure of hearing them through my dumb-waiter say to my attendant down stairs, 'Mr. Landy took such pains with us we were much pleased; but then, of course, he could not take such pains unless he was paid, and we are quite willing to pay him when we get the results we desire.'"

We think we have said enough for this time to keep the subject alive. We have, as we have said, a large quantity of letters, each day increasing, from which we shall draw in our next paper on this subject. Meanwhile, thanks to those who have responded. We want to hear from everybody. It is possible that we may print something for general distribution among the craft, which they can hold in their hands before their patrons, as a helper to better prices. The scheme is working, and shall be yours in due season. Read carefully and thoughtfully what follows.

VIEWS OF THE FLOOD AT CINCINNATI.-Mr. J. LANDY, Cincinnati, Ohio, has favored us with a number of remarkable views of the flood at Cincinnati. A little more of architectural splendor in the buildings, and the transformation of the ordinary boat into the gondola, would warrant us in supposing that these are views of Venice. The streets which we traversed dry-shod (except from the snow), a few weeks ago, are now flooded to their second and third floors; some of them with boats of all kinds moving in all directions to and fro. A terrific loss must have followed such a flood as this. Our readers are all familiar with the fact that it did. It is a picturesque scene, to say the least, though certainly a sorrowful one. The photographs were made on dry plates, and are of excellent quality. Here and there, a developed instantaneous bit is eaught with men rowing boats, looking into the camera as they rowed, steering themselves on rafts, etc. Mr. LANDY makes a series of fortyone of these views. Send to him for a catalogue.

Mr. C. H. Scofield, Utica, N. \overline{Y} , calls attention to his shutter for instantaneous work. Send for his circular.

Editor's Table.

AN ART UNION.—Do not fail to read the advertisement of this admirable magazine, to be found this month in our advertising columns. Every photographer should secure this splendid work, and derive benefit from its instruction. It is invaluable to all who take it.

PICTURES RECEIVED .- From Mr. ODIN, Wheeling, W. Va., views of the overflow on the Island opposite Wheeling. From Messrs. Homer & Co., Temple Place, Boston, Mass., excellent examples of their cabinet work, hard to excel. From Mr. D. T. BURRELL, Brocton, Mass., some excellent composition pictures, together with the results of cabinet pictures of excellent quality. Two sets of companion pictures from Mr. Burrell. The first, entitled Christmas Eve, "Good Night," and the other Christmas Morning, "O, Des See;" and the others, "Stolen Fruit, Danger," and "Stolen Fruit, Enjoyment," are capitally done; and show not only the true artist, but true sympathy on the part of the subject. Mr. BURRELL has spent a good deal of time upon these pictures; and finds them to pay, not only in the practice he receives, but in the remuneration. He recently assisted at the Skating Rink Carnival, at Boston, in making one hundred negatives by electric light, five seconds exposure, and not a negative lost. Pretty good for a first attempt with artificial light certainly. Mr. BURRELL promises us his developer for publication soon. The quality of his work makes us want it. From Mr. W. H. KIBBE, Johnstown, N. Y., a series of photographs of excellent quality, including one of himself and an amusing picture of his little son Arthur, eaught during a fit of yawning. From Mr. C. T. STUART, Hartford, Conn., two excellent pictures of our friend Mr. J. F. RYDER, of Cleveland, Ohio. We think we never saw a better picture of our friend than the larger one sent us. From Mr. F. THORS, San Francisco, Cal., some of the most pleasing pictures it has been our privilege to see for some time, pleasing because of their artistic posing and lighting, and lovely quality of the plates on which they were made. The rendering of the softest lights and shades is perfect, without the least trace of hardness. Mr. THORS informs us that he uses plates manufactured by Dr. S. C. PASSAVANT. We do not see how anything could be much better. From Mr. E. T. PIERCE, a picture of a caricaturist. Twelve different grimaces. Very curious indeed. From Mr. K. T. Sheldon, West Winsted, Conn., some very pretty 8 x 10 views, from dry plates, of scenery in the neighborhood of Mr. Sheldon's home. A good deal of artistic judgment is exercised in the choice of these views, and together with their photographic excellences they make an admirable series.

REMOVAL.—Mr. W. F. ASHE, artistic backgrounds and accessories, has removed to 68 West 4th Street, four blocks west of Broadway, and in a circular to the fraternity says:

"I wish to inform my esteemed patrons that the past season has been a most successful one, having increased the number of my customers considerably.

"I attribute this gratifying result mainly to the manner in which I perform my work, it always being tasty and artistic in every respect. "With my new studio fitted up with all the modern improvements, the most refined demands from a critical public can be satisfied, and a visit to my establishment, which has the largest showroom, containing the greatest amount of stock of any place in the world, will be gratefully appreciated.

"I have again added numerous new designs to my great variety of patterns for BACKGROUNDS and ACCESSORIES, and keep also in stock a large quantity of goods for parties to select from, saving time and delay on orders."

A NEW DRY PLATE MANUFACTORY .- Mr. CHAS. W. HEARN, well known to all our readers as a contributor to photographic literature, and the author of Hearn's Practical Printer, has embarked in a new industry of manufacturing photographic dry plates for the trade. Hearn's abilities as author and photographer, practical in every way, should be a guarantee to all for the quality of his plates. If any one doubted this, they would only need to examine the admirable collection of photographs which are now in our office from Mr. Hearn's dry plates. They are mostly 14 x 17 in size, and show most beautifully the excellent qualities of this new manufacture of plates. If Mr. Hearn can manufacture plates that will produce such results continuously, and will have the wisdom not to change his emulsion when he has it of so excellent a quality, we predict for him an extensive business and a profitable one. One thing is very certain, he is beginning business in the right way. He worked at his process for a long time, experimenting and testing until he was sure he was right, before he allowed himself to make known his intention to the trade. He does not, therefore, come as a new and inexperienced manufacturer, but one who knows what he is about. He has our best wishes for his success.

The Inglis Dry Plate. — The Rochester Herald devotes nearly a column to a description of the Inglis dry plates, and the advantages which the new firm have over many others. A description of the factory states that the capacity of this new institution is four thousand plates per day. The good qualities of the plates are commented upon, but since our patrons are becoming each day more and more apprised of these we need not repeat them here.

A New Stock-house in Philadelphia.—Messrs. Buchanan, Smedley, & Bromley, have opened a new stock-house at 25 North Seventh Street, Philadelphia. See their advertisement in proper place. These three young gentlemen sprang from the house of T. H. McCollin, and having a large acquaintance in the trade we predict a bright future for them. They have abundant capital, youth, energy, hope, and a grand, newly selected stock of goods, and, doubtless, will succeed. Messrs. Willis & Clements informs us also that their office will be with these gentlemen, who are trade agents for the sale of platinotype materials.

Messas. Wilson, Hood & Co., 825 Arch Street, Phila., have favored us with their March pricelist of photographic outfits, which should be given attention by all who are interested. The price list is a model of convenience and compactness. Accompanying it is a list of chemicals, accessories, bags, etc., together with a bargain list, to which they ask special attention. These bargain lists are becoming quite a feature among the trade now, and should be consulted by buyers. Free copies of all these things will be sent to applicants.

The Her Dry Pevel. Co., Providence, R. L., have favored us with their price list. Every size is made, from quarter size up to thirty by sixty. By reference to the advertisement it will be seen that the eigentlemen come to us with excellent te ([monal] a to the qualities of their plate. We half presently have the pleasure of

showing our readers an example of work made on the Hub plates. More anon.

WE regret to learn of the decease of Mrs. I. N. Cook, wife of our old friend, and the well-known photographer, Mr. I. N. Cook, Tiskilwa, Ills. Mrs. Cook was a lady highly esteemed, and a warm friend of our art for over a quarter of a century.

A BIG stir in the dry-plate business has taken place during the past month. The CHICAGO DRY PLATE COMPANY have made an assignment, being unable to cope with the competition necessary to keep up quality and production. A new concern is rising from its ashes, we understand. Judging from a circular we received, another concern, whose advertisement was some time ago withdrawn from our pages, finds something the matter, since it is obliged to advertise for a certain lot of plates in the hands of dealers, who assisted them to trade when they were in want, are damaged and cannot be guaranteed. This is one of the funniest things we ever knew to occur in business, and probably the secret will be made plainer next month. In addition to this dry-plate news, our readers will observe, by referring to our advertisements, that two new concerns have been started, and their advertisements appear in this month's issue. By referring to our cover, they will see it decorated in the usual way by our enterprising friend, Mr. Cramer.

ITEMS OF NEWS.—Mr. F. C. BEACH, of The Scientific American editorial staff, is, with a number of friends, working up an Amateur Photographic Society in New York. The call for a meeting at Room 24 Cooper Institute, on March 28th, was heartily responded to by a large constituency. From the circular we quote the following, which sounds like business: "The purpose of the new Society is to provide for its members meetings of practical interest, illustrated by useful and interesting experiments, in order that information may be gained by seeing as well as hearing." Bravo! We shall keep our readers posted on the movements of the new body.

A Great Fire. On the 29th of February, the extensive Chemical Works of Messrs. Powers & Weightman, Ninth and Parrish, were destroyed by fire. The loss amounted to nearly a million of dollars. But little suspension in business occurs, however, so far as photographers are concerned.

Specialties.

ADVERTISING RATES AND TERMS FOR SPECIALTIES.—Please make out your own bills and remit with your copy to insure insertion. Three lines, one insertion, \$1.50; six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. ** We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement.

NOTICE OF REMOVAL.

On and after May 1, 1884, our address will be

216 East 9th St., New York.
At the same date the Chicago Office will be discontinued.

LAFAYETTE W. SEAVEY.

W. F. ASHE, ARTISTIC BACKGROUNDS

ACCESSORIES.

REMOVED TO 68 WEST FOURTH ST.,

4 BLOCKS WEST OF BROADWAY, N. Y.

My new studio is fitted up with all the modern improvements, and the most refined demands from a critical public can be satisfied. A visit to my establishment, which has the largest showroom, containing the greatest amount of stock of any place in the world, will be gratefully appreciated.

I have again added numerous new designs to my great variety of patterns for backgrounds and accessories, and keep also in stock a large quantity of goods for parties to select from, saving time and delay on orders.

EXCELLENT gallery in Mississippi for sale cheap for cash. Town healthy. Five thousand inhabitants; growing rapidly. Only one other gallery (an inferior one) in the county. Satisfactory reasons for wanting to sell given on application. Address K. G.,

West Point, Miss,

ROCKWOOD SOLAR PRINTING CO.

17 Union Square, New York.

TIME.—It is our intention that every order received in the morning's mail (when not to be put on stretchers) shall leave this establishment the same day or the following morning. If too late for the morning work, it is sent on the second day. Having our own engine and electric light, we are not at all dependent on the weather.

GEORGE H. ROCKWOOD, Business Manager.

G. HANMER CROUGHTON,
ARTIST TO THE TRADE,

DOUBLE FIRST-CLASS PRIZE MEDALIST.

All kinds of photographic printing. Oil, water, pastel, crayon, India-ink, and negative retoucher.
914 Chestnut Street, Philadelphia.

WAYMOUTH'S

No. 18. VIGNETTE No. 18.

The old form of No. 18, Waymouth's Vignette Papers, oval, has been discarded, and a new pear-shaped style is now ready in its place. It is a beautiful piece of gradation and prints perfectly. Price \$1.25 per dozen. For sale by all dealers. See advertisement for all sizes.

No. 18. NOW READY. No. 18.

Wanted.—A gentleman and lady to take charge of a photographic business in the South. An unusual opportunity to do a fine business. Studio has an excellent reputation of over nine years' standing. Plenty of Dallmeyer and Ross instruments. Seavey's accessories and backgrounds. The whole premises were recently refitted. Population of city estimated at 25,000. To suitable parties a nice cottage and stable will be furnished rent free. Send samples of work and references to "Hiram,"

Box 1115, Dallas, Texas.

BARGAINS!

warranted as represented, and money refunded if goods are returned uninjured. BACHRACH & BRO..

Cor. Eutaw and Lexington Streets,
Baltimore, Md.

The Photographic Mosaics for 1884 is nearly all gone. Like its predecessors, it contains articles of interest to all persons connected with the art of photography. The introductory article by Edward L. Wilson is teeming with useful information, and should be read to be appreciated. As there is but a limited number of copies printed, those who wish to have a useful as well as ornamental work for their studios, should avail themselves by sending in their orders as quickly as possible. Nearly all gone.

S. G. NIXON,

PORTRAIT ARTIST,

No. 813 Arch Street, Philadelphia, Pa. CRAYON AND WATER COLOR PORTRAITS.

Solar prints and photographic enlargements furnished and finished in crayon, Indian ink, or water colors. Photographic coloring on plain or albumentzed paper and porcelain. Copies fini hed in Indian ink and water colors.

References and term on application.

1864

M. WERNER,

1884.

PORTRAIT ARTIST,

No. 102 N. TENTH STREET, PHILADELPHIA.

Photographs finished in crayon, India ink, water colors, and pastel, in all sizes, in the very best styles, and at moderate prices.

Solar Prints and Enlargements Furnished.

EVERY photographer in want of excellent lenses, for any purpose, will best serve his interest by consulting the new illustrated price-list of Messrs. Benjamin French & Co. before purchasing.

ADDRESS CHARLES EHRMANN, Harlem, N. Y., Secretary of Association of Operative Photographers of New York City, for operators, printers, and retouchers, or in care Wm. Kurtz,

233 Broadway, N. Y.

NOTICE OF REMOVAL.—Mrs. Clarke, Artist, late of 561 Druid Hill Avenue, Baltimore, begs to inform her friends and the photographic profession that she has removed to 2104 North 20th St., Philadelphia, Pa., where she will be happy to receive any commission for water-color painting. Terms, etc., on application to Mrs. Clarke, or to the office of the *Philadelphia Photographer*.

FOR SALE.—Leading gallery in city of thirteen thousand in central Ohio. All modern improvements, and clearing \$2000 per year. Only eash will buy it. Price from \$2000 to \$2500.

Address Cash, care P. Smith & Co.,

Columbus, O.

* Wanted,—A first-class view operator who can work dry plates. A good salary for a man of good qualities. Address

ALFRED A. ADT,
Landscape Photographer,
Waterbury, Conn.

OPERATOR wanted in a fine first-class reliable gallery in Chicago. Must be a fine poser, steady and industrious, successful with children, and first-class with both wet and dry plates. Address in confidence, sending photo of self, and, if possible, sample of work, which will be returned.

Address Eric,

Care Douglass, Thompson & Co., 229 & 231 State St., Chicago, Ill.

PORTRAITS IN CRAYON.

The new book by E. Long, on the art of making portraits in crayon on solar enlargements, covers the entire ground, and is sold for the low price of fifty cents. For sale by

EDWARD L. WILSON,

Philadelphia.

A REMARKABLE OFFER .- In order to place the "Unique" within reach of photographers of limited means, it will be sold at the factory or through any stockdealer on trial for two weeks, and may be paid for in monthly instalments of \$5.00, net. C. H. SCOFIELD,

25 & 27 Columbia St., Utica, N. Y.

METAL GUIDES

FOR

A. M. COLLINS, SON & CO.'S

No. 26 GILT BEVELLED-EDGE CARDS.

The fancy-shaped mounts now so fashionable among photographers, require metal guides with which to cut the photographs. They are now kept on hand, and can be supplied in the following shapes, and at the prices mentioned:

	Each.
Cross	Each. \$1 05
Star	1 00
Palette	90
Leaf	90
Bell	90
Crescent	80
Egg	60
Triangle	90
For sale by	EDWARD L. WILSON,
	914 Chestnut Street,

Philadelphia, Pa.

THE genial well-known photographer, Mr. C. H. A. Tonndorff, has presented the public with a novelty in the photographic line. He calls his new invention Stamp Portraits. They are issued in sheets, gummed on the back and perforated like postage-stamps. Each sheet contains one hundred of these little gems. Their elegance and neatness, combined with their cheapness, will insure their popularity and create a demand for them. It will not be long before business cards and invitations will be adorned with these stamp pictures. John A. Sholten has, indeed, made use of them in decorating the programmes used at the Olympic Theatre and the Opera House, with excellent portraits of Mr. Irving, Miss Terry, and Maggie Mitchell. These pictures received the highest praise from all who received them. -St. Louis Globe Democrat.

FOR SALE IN THE BEST MINING CAMP IN AMERICA .- I have just received into my hands a good photographic outfit and full stock, which must be sold immediately. For particulars,

> J. H. EARDLEY, Address Grocer, Butte City, Montana Tv.

PROGRESS IN PHOTOGRAPHY.

\$3.00-Read Vogel's New Book.-\$3.00

SITUATIONS WANTED.

No charge for advertisements under this head; limited to four lines. Inserted once only, unless by request.

As printer and assistant retoucher. Has had several years' experience as printer. Address W. G. B., Box 275, Petrolia, Ont.

As printer in first-class portrait gallery. 'Can do any imaginable style of printing. Address Thomas E. Eagan, care C. W. Hearn, 514 Congress Street, Portland, Me.

In a copying house, as ink and water-color artist, operator, printer, or retoucher. Specimen of work or reference on application. Address J. A. B., care Mrs. H. A. Dillenbeck, Pulaski, Oswego Co., N. Y.

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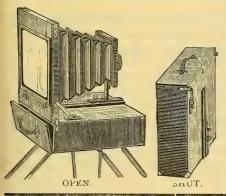
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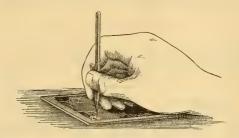
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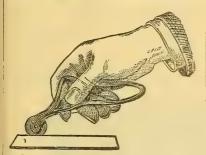
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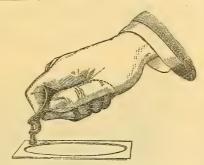
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$2\frac{1}{8} \times 3\frac{1}{4}$	$3\frac{1}{2} \times 4\frac{7}{8}$	$5\frac{1}{2} \times 7\frac{1}{2}$	7×9		$2\frac{3}{4} \times 4\frac{1}{4}$	$3\frac{7}{8} \times 5\frac{1}{4}$	$3_{8}^{7} \times 6$
$2\frac{3}{8} \times 3\frac{3}{8}$	$3\frac{5}{8} \times 5\frac{3}{8}$	$5\frac{5}{8} \times 7\frac{5}{8}$	$7\frac{1}{4} \times 9\frac{1}{4}$	$2\frac{5}{16} \times 3\frac{15}{16}$	STERE	OD A DIT	4 x 6 k
$2\frac{5}{8} \times 3\frac{5}{8}$	$4 \times 5\frac{3}{8}$	$5\frac{3}{4} \times 7\frac{3}{4}$	$7\frac{1}{2} \times 9\frac{1}{2}$	Arch Tops.		Cornered.	Round
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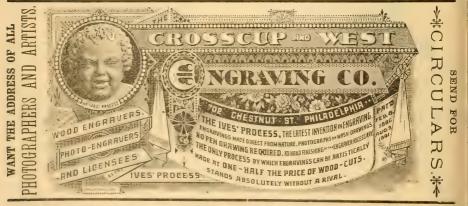
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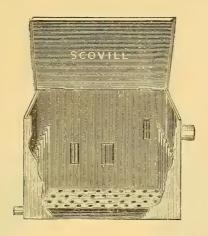
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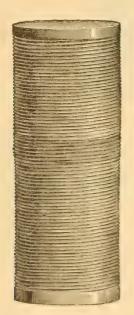
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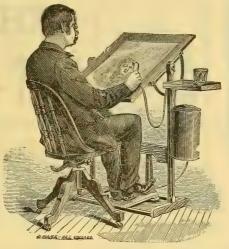
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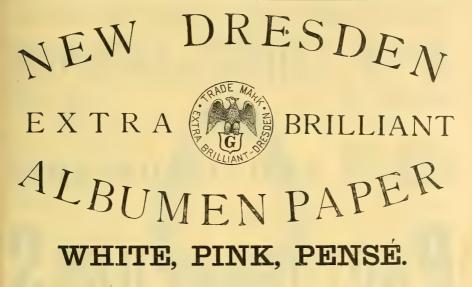
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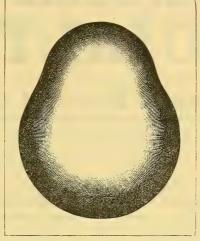
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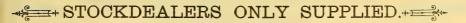
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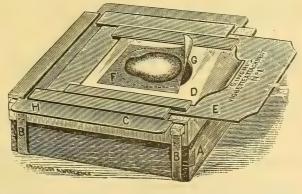
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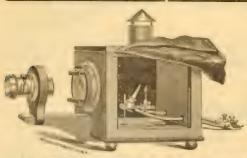
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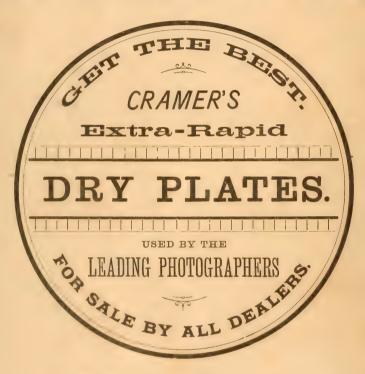
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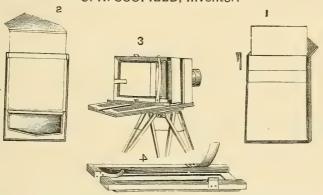
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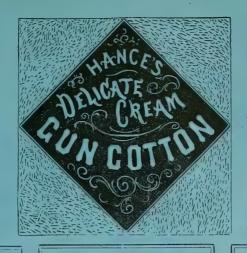
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No. 245.

THE SOCIETY OF AMATEUR PHO-TOGRAPHERS OF NEW YORK.

THAT New York needed an influential, active, progressive, and independent amateur photographic society has been well known for several years. The wonderful advance made in photography by the introduction of the gelatine dry process has made possible the successful formation of what is likely to be a prosperous society.

Mr. F. C. Beach, of the Scientific American, realizing the wants of amateurs in New York, issued a call to those interested to meet with him on March 28th, at room 24, Cooper Union. The interest in the subject was intense, as was shown by the large number of gentlemen present, many of whom were strangers to each other. A proposed constitution was distributed among those present, arranged to be amended as desired. Mr. Beach, who called the meeting to order, was nominated Chairman, and Mr. W. E. Partridge Secretary pro tem.

The Chairman then made a few remarks, as follows: "The object of this meeting is to take steps towards the organization of a new, leading amateur photographic society for New York, which shall give to its members practical and useful information. Nowhere are there so many amateurs in proportion to the population as in New York and vicinity, and it seems to me that the time is ripe for the formation of a society

whose proceedings shall be an honor and a benefit to the community.

"As amateurs, we need to compare notes, to impart to each other new and better formulæ, to investigate, experiment, and talk freely, to invent improved apparatus, to have practical demonstrations and experiments with a lantern exhibition occasionally, so that our meetings may be made interesting and useful.

"There has been a movement made against amateurs in Chicago, happily, however, only by one firm, on the ground that they seriously interfere with the professionals' profits and business. Amateurs, in my opinion, really help the professional in several ways; they take time and pains to find out and test new and better formulæ, they investigate and invent improved apparatus. Their acquaintance with photography enables them to discriminate and tell what is or what is not a good picture; they therefore compel the professional to raise his work to a higher standard, and, lastly, they throw new work into his hands. I believe in New York the feeling towards amateurs is friendly, and I trust it will continue."

In closing, Mr. Beach remarked: "Were it not for the persevering, painstaking investigations of the amateur photographer, photography would not hold the advanced position of to-day." He thanked the gentlemen for their attention, and read a few letters on the subject from Rev. George H. Hepworth; Joseph P. Beach, formerly Editor of the New York Sun; Dr. P. H. Mason, of Peekskill, New York; Mr. G. S. Read, Paymaster, U. S. Navy; Prof. Daniel Draper, Director Meteorological Observatory of Central Park; Mr. Randall Spaulding, of Montclair, N. J.; Mr. Geo. G. Rockwood.

We give below two or three letters of interest:

From P. H. Mason, M.D.

PEEKSKILL, N. Y., February 29, 1884.

F. C. BEACH, Esq.

SIR: I see no reason why New York should not have one of largest and best amateur societies in the country, and now, before another summer season sets in, is just the time for the birth of such an associaction. I wish you every success in the project, and heartily join you in the desires you express in the *Times*.

I am very truly yours,

P. H. MASON, M.D.

Copy of Rev. George H. Hepworth's letter.

531 FIFTH AVENUE, March 20, 1884.

MY DEAR SIR: I am in receipt of your courteous invitation to meet with the amateur photographers. Did not my pressing engagements prevent, I would gladly do so, but a man who gets up at six and goes to bed at midnight, whose cerebellum feels like a lump of lead, may perhaps be excused from assuming more responsibility. Give my regards to the craft; tell them that I am a photographer who always manages to get a drop of soda in the ammonia and spoil the picture. My efforts are embryonic, I feel sadly conscious that I am still in the preliminary steps of that process which is known as the survival of the fittest. If I should present one of my pictures to your Society, it would adjourn sine die, and go home with perfect faith in the good oldfashioned doctrine of total depravity. Therefore I spare you.

Yours sincerely,

GEORGE H. HEPWORTH.

To Mr. F. C. Beach.

From Mr. George G. Kockwood, 17 Union Square, N. Y.

New York, March 26, 1884.

MY DEAR MR. BEACH: I see no other way than to be honorables in the new society, although, so far as the work of the Society goes—the photographing of outdoor views, etc., I am in the line of amateurs. But it will be hard to draw the line, and I would not admit as active, voting members anyone who gets his living, directly or indirectly, by photography. I shall be heartily with you in any way you can suggest.

Yours very truly,

GEORGE G. ROCKWOOD.

After the reading of the letters, the Chairman stated that, in accordance with the call, should there be a sufficient number present interested, they would proceed to form a Society. To test the matter, he requested all those persons in favor of the organization of a new amateur photographic society to rise; about seventy responded. The sentiment was unanimous.

After a little confusion it was suggested that those desiring to join a society should sign their names, which would entitle them to vote upon a constitution. The announcement that fifty-three signatures had been given was greeted with applause.

Discussion then ensued as to the scope of the society, whether professionals should be active members, and if not, on what terms they might come in.

Dr. Erhmann considered it of much importance that the scope of the society should not be confined to amateurs; it would surely fail unless it included all.

Mr. C. Wager Hull explained at length how a society which Mr. Newton and himself formed several years ago became bankrupt and useless through the petty jealousies and ill feeling of stockdealers who were admitted as members. The stockdealers, he claimed, was the rock upon which they split.

Mr Fiske said: I keep a small stock of photographic materials on commission, for the accommodation of my friends, and should like to know whether I am considered an amateur.

The Chairman: That question has been thought of, and I think a majority of amateurs decline to allow that a person who is engaged in the sale of photographic goods or materials is entitled to become an active member.

Mr. Hull: There is no question about it. He is an amateur if he gets no profit out of it; if he gets a profit out of it, he ceases to be an amateur.

Mr, Beach exhibited a few prints, made from negatives by A. L. Henderson, of London, which were taken in the $\frac{1}{230}$ th part of a second.

Mr. Newton remarked that he had prints from Muybridge's negatives, taken on Bath plates in the $\frac{1}{7000}$ th part of a second, with a shutter which worked horizontally under a spring pressure of two hundred pounds.

The question was asked, Which was the most rapid shutter?

In reply, Mr. Hull said: The best shutter that I have seen is the Prosch shutter. It might be called a revolving shutter. It works with a spiral spring, and the motion is exceedingly rapid. It goes so fast that I think it is quick enough for all our work.

Mr. Gilder showed a novel metal shutter of his own construction. It consisted of a central shaft, provided with a large cogwheel which engaged in two smaller cogs, one above ard one below, arranged upon one side of the metal cap which fits over the lens tube. Attached to each shaft of the small cogs, at their ends, were two swinging shutters. The small cogs were geared with the large cog wheel in such a way that when one shutter covered the lens the other was down or out of the way. A milled head was attached to the end of the shaft of the large cogwheel. To operate the shutter, the milled head was turned quickly with the fingers, the large cogwheel imparted the motion at once to the small cogs, and they in turn rapidly raised the top shutter from off the lens tube, and closed the bottom shutter over the same. The motion was positive, and the operation simple and quick. Mr. Gilder said, in reference to the shutter: I do not know in what time the exposure can be made, but certainly it is quick enough to take the quickest moving object.

The Chairman then requested the room to

be darkened, and gave a demonstration on bromo-argentic paper, illustrating its use in the copying of drawings. A sheet of gelatine paper was laid, with the film side up, upon a cardboard drawing in a printingframe, and exposed for a minute and a half to the flame of a No. 3 Leader kerosene burner, and successfully developed with oxalate and iron in the proportions of one part of iron to four parts of oxalate, and fixed in hypo, one to six. The Chairman stated there was nothing specially new, except that in exposing with the sensitive side of the sheet away from the face of the drawing, the letters and tigures of the drawing were reproduced non-reversed, which was of great advantage. He copied a letter in the same manner. To obtain a copy of the drawing on ordinary readvsensitized silver paper, with bright sunshine, would require thirty minutes. The gelatine paper used was Morgan & Kidd's, of London.

After the demonstration, the Chairman stated: I have been informed that Mr. Newton has made some improvements in developers, and as we are all interested in developing instantaneous drop-shutter pictures, I should be pleased to have him give his formula to the Society.

Mr. Newton said, in response to the Chair: In developing dry plates that have had instantaneous exposures, it is desirable that a developer be used that will bring out all the detail in the shadows, and not have the high lights over-developed; in fact, that will give a picture that shows just the right exposure to make a good printing negative. That is what is desired. gelatine dry plates are now made so very sensitive, that it is not very difficult to get a good negative on most any of the good commercial plates by the developers which are sent out with every package. Some of them are accompanied with a formula which calls for ammonia as the developing agent. In my experience it is a bad developer, especially if the plate has not been properly exposed to fully develop in a limited time. If you undertake to push the development of a gelatine plate with ammonia, a green or red fog is inevitable. I do not believe that a gelatine plate can be developed with

ammonia where the exposure has been short and the development prolonged, without that result. I went through a great many experiments five or six years ago. tried almost everything in the form of an alkali that would develop a picture, and I settled down upon the use of carbonate of soda. So far as I know, it had never been tried. At that time I tried the carbonate of potash; you will find that published in the journals five or six years ago. Carbonate of potash would make a good negative, but required much more pyrogallic acid; more than double the quantity to get the same intensity that was required with the use of carbonate of soda; but on another account I choose the soda, for the reason that its action was less corrosive. Now I have used the carbonate of potash and the carbonate of soda, and you can get results with the two that you cannot get with either one of them separated. I have given it to quite a number, and so far they have pronounced it the best developer that they have ever tried. Mr. Anthony told me it was the best he ever tried. The way I make it is a little different from what I gave it, because I put it in a more concentrated form. Into a quart of water I put three and one-quarter ounces of carbonate of potash and three and one-quarter ounces of carbonate of soda; that will give you (reckoning four hundred and eighty grains to the ounce) very nearly one hundred grains to the ounce; a little short, but near enough for all practical purposes. If you buy the carbonate at the grocery stores, dry it before you use it-dry out the water. Into another quart of water I put three and one-quarter ounces of sulphite of soda. Those are the two stock bottles. Three ounces of each of those two stock solutions with six ounces of water added, will give you twelve ounces. each ounce there will be twelve and onehalf grains of each of those ingredientspotash, soda, and sulphite. That will give you twenty-five grains to the ounce of developing solution, that is, the carbonate of The sulphite will depotash and soda. velop a picture, but it is not reckoned as a developer; it is used here to give color to a negative or to prevent color. The developer given will develop a picture without any restrainer, and give you a clear, beautiful negative, if the exposure is right. If the exposure has been too long, then you must add a restrainer or make it weaker.

Now, in contrasting the soda developer or the potash, with the ammonia developer, there is this to be said in its favor: you are limited to a very small range with the ammonia developer. If you get up to six or eight drops to the ounce, you are pretty sure to get a fog any way; I do not care how much bromide you have in it; but with this developer you cannot get a fog with the strength that I have given you, twentyfive grains to the ounce for a very rapid exposure; two and one-half grains of dry pyro to the ounce, is the proper amount of pyro. If you reduce the strength, however, do not use but one grain and a half of pyro. As you increase your strength up to fifty grains, you run your pyro up to six grains to the ounce. You can go on up so that you will have to use twelve grains to the ounce, by increasing the quantity of alkali. The quantity of pyro must be in harmony with the strength of the alkali development in order to get the proper intensity.

I have found, in my experience, that acid solutions of pyro after standing two months, lose four-fifths of their potency as a developer, so that I do not use them any more. I never was in favor of using pyro in solution anyway. Dry pyro is the best form in which pyrogallic acid can be used. Put the dry pyro into the solution that I have just given you; you can put it in half an hour before you want to use it. You can develop four or five negatives right in this same solution, one after another. I have developed four, and the last one was just as good as the first. With the soda and potash developer, Mr. Newton stated that no matter whether a plate had been exposed one second or sixty seconds, he was able to obtain a good negative. When the plate was known to be greatly over-exposed, he added a minimum quantity of the soda and potash solution, and restrained the development with two grains, or twenty minims, of a ten per cent. solution of bromide of sodium, to two ounces of developer; should this prove insufficient, more should be added in small quantities.

Mr. Partridge stated that he had used a potash developer somewhat different from Mr. Newton's; he found it advantageous in combination with carbonate of soda. When he pushed the development too far, he obtained a unique blue fog, perfectly transparent.

Mr. Hull: I have nothing to say except words of praise of the potash and soda developer. I have a few words to say in regard to the light by which to develop. have spent a good deal of my spare time in endeavoring to get rid of the offensive red light. Instead of the red light I use an olive-green glass, with a couple of thicknesses of lemon-colored tissue paper. will give you as pleasant and as delightful a light as ever a man worked behind, pleasant to the eyes, and so much in value that there is no difficulty in reading the finest print and doing anything behind it, and not one iota of fog. You can watch the whole process; you can judge almost as nicely as if you had it in any bright light. The olive-green glass alone will not answer for the glatine plate. Place the olive-green glass outside, then lay over it two thicknesses of this lemon-colored tissue paper-I use two thicknesses simply for the reason that the paper is very thin. Place a piece of plain glass over the paper, so that in splashing water does not strike the tissue. The glass is a green with considerable yellow; that is what I should call an olivegreen.

The Chairman stated that he was fitting up a new dark-room, the window of which was exposed to diffused daylight. He used one thickness of pot-orange glass, coated with ground-glass substitute. In addition, the window was screened on the outside with a ruby curtain.

Mr. George H. Ripley made some remarks upon his method of working with the carbonate of soda and pyro developer. He preserves the pyro with sulphite of soda and sulphurous acid as one solution, and pyro, sulphite of soda, and citric acid as another. In using these solutions in combination with carbonate of soda, he said: I have made a practice of keeping my old developer as long as it remains clear. I use one of those patent lager-beer-bottle stoppers. No matter

whether it is an instantaneous plate or a full exposure, I commence with the old developer. In this way I am able to ascertain how the picture is going to develop; should it develop rapidly in the old solution, I pour that off, and apply the citric acid solution of pyro, with a small quantity of carbonate of soda. In case the exposure has been very short, I substitute for the old developer the sulphurous acid solution of pyro with the soda. The use of the old solution of pyro enables me to judge as to the probable development required. With a fresh developer, I develop, as a rule, three or four plates, and then consider that an old developer. If I have three or four plates to develop, I pour out of my old developer bottle sufficient to cover the plates, and use that, following it with the new developer, and then I throw away the old developer and use the new developer that has been used on three or four plates as old developer, again mixing fresh developer as needed. When through, I bottle the new developer (which I now term old developer), and use it as stated. If by any chance it should become muddy, I never keep it.

The Chairman: Do you use the old developer more than once?

Mr. Ripley: I use the old developer for three or four plates before throwing it away.

The Chairman called the attention of the members to the advisability of having an album, and wished them to furnish one or two pictures of their best work; he stated that it was the intention of the Society to have lantern exhibitions occasionally, and asked them to prepare slides for the same.

A vote of a large majority of those present soon decided that the new society should be strictly amateur; controlled and managed exclusively by amateurs.

Much time was consumed in selecting a name. Mr. Henry J. Newton had the honor of being the successful man in this respect, so "The Society of Amateur Photographers of New York" was voted to be the name, and the Chairman wrote it for the first time in full upon the blackboard

A large part of the evening was taken up in discussion on the membership clause in the Constitution.

The meeting adjourned to April 8th, at a

late hour, but not until a constitution had been adopted.

Among the gentlemen who signed the roll were John H. Janeway, M.D., U. S. Army; John Butler, M.D., J. F. Apgar; Henry J. Newton, President Photographic Section of the American Institute; C. Wager Hull, Superintendent American Institute; Henry V. Parsell, Gilbert A. Robertson, and many other interested amateurs.

MEETING OF THE SOCIETY OF AMATEUR PHOTOGRAPHERS, held April 8, 1884, at 1321 Broadway. About forty gentlemen were present.

The Chairman, Mr. Beach, called the meeting to order. After some preliminary business the Chairman announced that the election of officers was in order.

On motion of Mr. Apgar, a nominating committee was appointed.

The nominations which were afterwards handed in were:

President.—Mr. F. C. Beach. Vice-President.—Mr. W. H. Gilder. Treasurer.—Mr. Joseph S. Rich. Secretary.—Mr. W. E. Partridge.

Mr. Partridge declined to serve, and on motion, Mr. W. C. Canfield was selected for his place.

On motion, the Secretary was requested to vote the ballot of the Nominating Committee as the vote of the Society, which was done.

GERMAN CORRESPONDENCE.

Kuyser's New Dry-plate Changing-box— The Photographic Society's Standards for Lenses, Screws, and Stops—New Experiments for Reproducing Dyes in the Right Proportion of their Brightness.

THERE is a great variety in changing-boxes for dry-plate photography, but which kind is of the best construction is a subject of dispute amongst photographers. Hence, it seems almost ridiculous to discuss the merits of any new inventions in this direction. The old story of Columbus's egg, which every one could make stand upon its end after being shown the method, holds good in the invention of changing-boxes as well as in the discovery of a continent. Dr.

Kuyser, the second President of the Society for the Advancement of Photography, has recently taken the lead in this direction. In place of the ordinary glass plate, he makes use of emulsion films and collodion-leather, which are not only very light in weight, but less liable to break than glass plates. Nevertheless, glass plates may, if desired, be used with the same case. It has a dark sleeve upon the side, which facilitates the changing of the plates without the risk of entrance of light. The changing takes place in the box itself, by putting the hand inside the dark sleeve. The first plate which has been exposed is placed behind, and the second plate advanced, ready for exposure. In using the box, each film is loosely attached to a black card, which not only gives it the necessary firmness, but also protects the sensitive film behind it from the influence of the light. The box is about six centimetres thick, holds fifty plates, and weighs, when full, two kilogrammes. These plates, in connection with this changing-box, offer many other advantages. For instance, it will admit of the introduction of various sizes of plates; a notch may be made upon the margin of the card, which will indicate to the touch the size of the plate, and if it is not the one desired, it may be exchanged for something else; other advantages are the compactness and lightness of the box, and the small space occupied by it. If it is desired to put glass plates in the box instead of the films, it is best to put to their backs those square pasteboard frames which are used in America for packing dry plates.

The Photographic Society of Great Britain has appointed a committee to discuss the advisability of the adoption of a universal screw for cameras, and an uniformity in sizes of stops. The great latitude indulged in by opticians is a cause of much trouble and vexation. There is no uniformity in sizes of stops, and hence there can be no safe data for exposures. The variety in sizes of screws is very perplexing to those who wish to change one objective for another upon the same camera. The committee proposes the following:

- 1. The approximate equivalent focal length of a lens is to be marked upon the mounting.
 - 2. As the standard stop, that one should

be selected whose diameter is equal to onefourth the focal length; this stop should be designated as No. 1. (In the case of the aplanatic, such a standard is not practicable, because the diameter of the aperture is oneseventh of the focal length.)

- 3. Stops with smaller apertures should be so made that the area of the aperture should be the relation to the normal or standard stop of, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{16}$, $\frac{1}{32}$, $\frac{1}{64}$, and should have engraved upon them the figures, 2, 4, 8, 16, 32, 64. These figures indicate for the particular stop the time of exposure in seconds, if 1 represents the time of exposure for the normal stop. I would, however, recommend, in addition to the sizes enumerated, the introduction of an intermediate stop.
- 4. If the lens will not admit of a stop of one-fourth focal length, the committee recommends the designation of the largest stop with a number which indicates the relation of one-fourth its superficial contents to the normal stop. This, with aplanatic, equals 5, the other stops decreasing in the proportion of area, 2, 4, 8, 16, 32. If, for instance, stop 32 is used, multiply 32 by 5, which gives 160 as the time of exposure to be used with that stop, supposing 1 to be the duration of exposure for the normal stop. If an objective has larger stops, these should also be designated with numbers indicating the relation of their fields to the standard or normal stop.

In reference to flanges, the committee recommends that the screws should have the diameters respectively of $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$ inches, and twenty-four threads to the inch. With larger lenses the diameters should increase in the same ratio, and only have twelve threads to the inch. The committee further recommends a series of adapters which may be screwed into the larger flange, to admit the attachment of a smaller objective. This will do away with the necessity of changing the flanges on the front of the camera. It would be a good thing if every optician would unite with the committee in bringing about this desired unanimity. Photography is an interesting art. English apparatus has found its way to America, and American and German is entering England. What a boon it would be if the harmony in makes was so established that any lens would fit upon any camera, no matter where made.

Just now the general interest of the photographic world is bent in the direction of the effort which is being made to overcome the false representation of colors in photography. I need not remind the photographer that yellow takes mostly black, blue mostly white, and that this defect in the art can only be surmounted by retouching the negative. Now this is just a subject which I have been working upon since the year 1873. I have shown that it is possible to make bromide of silver sensitive to the so-called non-actinic rays of the spectrum by the addition of elements which optically absorb those rays. This discovery was, immediately upon its publication, attacked by Carey Lea and Monckhoven, who sought experimentally to show its improbability. The British Journal even went so far as to hoot at the idea, and to make it a subject of derision. But Becquerel, a year later, demonstrated its truth experimentally. In the year 1875, Waterhouse, while in Calcutta, saw-on the occasion of the eclipse of the sun-the exposure taken with my colored collodion, the yellow and red portions of the spectrum. He repeated the experiments a year later, and with the best results, introducing a new element-eosininto the field of his investigations. Up to that time the subject was interesting only from a scientific standpoint; but even as early as 1873 I happily succeeded in taking a dark-blue band upon an orange ground in the appropriate relations of tone and color; that is to say, the blue dark, the yellow bright. But years rolled on ere practical application was made of this discovery. Ducos Du Hauron and Albert made, in 1877, the first practical use of it. Their aim was high. They endeavored not only to reproduce color in tones of black and white, but color with corresponding color; an attempt to which most serious obstacles were presented. They employed colored collodion and colored glasses; by the use of the latter they stopped the action of color they did not desire. Recently, the same principle has been employed with gelatine plates. I have published my experiments, which demonstrate the effect of color upon gelatine plates. Eosin, for the latter, has proved itself the best absorbent medium which was used; also in the experiments upon collodion plates. Eosingelatine plates, made by Clayton & Tailfer, in Paris, are even articles of trade. Eosin increases the yellow sensitiveness, and decreases the blue sensitiveness, of bromide of silver. The latter peculiarity is not confined to eosin, but is possessed by some other colors. This circumstance of the decrease of sensitiveness for blue, together with the increase of the yellow sensitiveness, is of the greatest importance, for without it the representation of color could not be properly accomplished. A series of experiments which I have made upon the plates of Clayton & Tailfer shows that they are for yellow rays nearly double as sensitive as they are for blue rays; their sensitiveness to red rays, however, is not greater than ordinary plates. This yellow sensitiveness, moreover, was not sufficient to represent yellow pigment colors in connection with blue in the right scale of tone colors.* I endeavored to find if it were possible to increase the yellow sensitiveness of these plates, and at the same time to spur up the red sensitiveness. I have succeeded in both attempts. I have made wet collodion plates which are eight times as sensitive to yellow light as to blue, and at the same time we have a sufficient red sensitiveness. The taking of a table of colors with this collodion is very interesting. The green is the brightest of all; pink and blue, on the contrary, which are usually represented as white, are here shown dark: yellow is bright. I have published a colortype in the Photographisches Mittheilungen which shows this change of colors; but I am still deep in the investigation of this very interesting study.

Yours very truly, H. W. VOGEL. Berlin, March 30, 1884.

MESSES. MONTFORD & HILL, Burlington, Iowa, are rejoicing over their new palace of art. It, with their splendid work, receives a half column in one of the city notices, a copy of which they have favored us with. Success to them.

OUR AMATEUR CLASS.

BY AN OLD AMATEUR. (Continued from p. 102.)

In a previous article, the writer endeavored to give some general principles to guide the amateur in the selection of suitable apparatus; but it should not be forgotten that, even with the most perfect camera and faultless lens, there may be wanting the ability to produce a good picture from the lack of knowledge in choosing the subject as regards light and shade. It is not only necessary to exercise the artistic sense in selecting a scene or group for representation upon the ground glass; to properly balance the picture by a judicious division of fore- and background; but the young artist must understand the true and only method of lighting the subject; and if he be willing to take the benefit of the experience of one who has labored long in the province of out-door photography, he will be able to produce a picture which will satisfy the most critical taste, and will not be subjected to the mortifying trial of having his picture "damned with faint praise," or of being told by some professional friend, "Well, it is pretty good, considering it was taken by an amateur."

It is a very good plan to go over the ground you intend to photograph first without any camera or apparatus whatever, to pick out little bits of choice scenery here and there, and to note down in a book their location. Study whether the subject looks best in shade or in sunshine; notice the direction in which the light comes, and the manner in which it lights it up; note, also, the time of day when the view looks best. In my younger days, I remember travelling with a professional photographer who, by the way, was an amateur-an amateur in the very sense of the word, since he was thoroughly in love with his subject. I remember how much more a scene was beautified when he pointed out to me the nice blending of light and shade which a certain direction of the sunlight gave to it. Photography is an art, and an art not to be learned in a few hours. Beautiful effects cannot be obtained by merely pointing a camera at an object, and giving it a certain number of seconds. No, it must be dili-

[%] Yellow pigment colors are much darker than spectrum yellow.

gently and carefully studied, like any other art, and, if properly studied, will not only develop the artistic sense, but also create a careful and conscientious disposition of mind.

When you start out on a trip, be careful to look over your apparatus; see that everything is right, that all the screws work well. Don't forget anything; make out a list of all you need, and check it off.

Such things may seem trifles, but experience will teach you that their neglect will interfere with your success. Carry a small screw-driver with you in your pocket. Do not be in a hurry with anything; keep cool, and start out leisurely. Have some system to guide you; it will be of service both on the field and in the dark-room; for instance, start out with the plate-holders packed with the slide end up, and, as you make the exposure, put them back in the box slide end down, which shows you at a glance that that slide-holder has been used.

One of the most amusing sights is to watch the green photographer handle a tripod. It will not stand straight for him; at first, one leg is too far out, then the other, and it at once "gives him away," as the boys say.

After you have selected your view, adjust your tripod by having the camera screwed on it, so that the front of the camera shall be in line with one side of the tripod top, or directly over one leg; then, in planting it, grasp two of the legs, one in each hand, close to the top, in such a manner that the camera shall point directly away from you, and send the third or free leg from you away in the ground; then level with your eye, and bring down the two legs, spread wide apart.

Perhaps no branch of photography has greater charms for the amateur than instantaneous photography. Beautiful results may be accomplished by the aid of instantaneous shutters—yachts in full sail, scenes upon the beach, etc. But the beginner should not err in getting too rapid exposures; there is a limit to rapidity in the representation of motions which, if exceeded, destroys all impression of motion to the beholder.

Science may have been benefited by the curious results obtained as shown in the pictures of the horse in motion; but I do not think artists will abandon their old-fashioned

method of painting animals and representing them in attitudes which seem awkward and unnatural to our normal vision. Neither should the photographer picture his object otherwise than it appears to his ordinary vision.

I have seen sea views in which the extremely short duration of exposure completely destroyed all idea of motion or volume in the water. If the time of exposure exceeds the velocity of the object taken, it gives only the appearance of rest or slower motion, and so the aim desired is not hit.

The gun camera has been recommended for instantaneous work; but the gun-stock is unnecessary; in fact, it is only in the way. All that is necessary to do is to rest the box upon the left forearm, and at such a height that the top is in line with the eye. One of the best means of getting the view properly upon the ground glass is by using the finder. It is a little instrument, consisting of a lens and a small ground glass, covered with a hood to shut out extraneous light. The image on the little piece of glass is, of course much smaller than that upon the camera glass; but, if the finder be properly adjusted, it will give the corresponding positions of the objects. For instance, if the principal object be seen too much to one side of the ground glass of the finder, all that is necessary is to move the camera until the view is properly balanced, and, holding the camera level, make the exposure. Of course, the focus of the lens has been previously adjusted upon the camera glass.

It will not be out of place to remind the operator not to allow himself too much latitude in the use of stops or diaphragms. Confine your attention to one or two stops. Study the disposition of your plate and lens, and never tax their energies beyond endurance. Endeavor to get some standard to work by. Be careful, above all, to shield your lens from the direct rays of sunlight entering it, and always see that the stop is completely in the slit; otherwise portions of the view will be entirely out of focus. Never forget to cover up the plate-holder, and to draw the slide with the covering cloth over it.

Before you make an exposure, look to all the screws. Nothing is more annoying than to have a camera go back on you just at the critical moment when any delay may make you lose an interesting view.

Next to instantaneous views, the taking of groups or portraits is, perhaps, the most interesting work of amateurs.

On general principles, portraiture is less satisfactory than landscape work, on account of the restlessness of the subject, and the difficulty in posing and lighting to secure a good likeness. Friends are seldom satisfied with a portrait, unless it looks like the work of a professional, taken in a gallery with all the accessories and special provisions for lighting and posing.

The desire to make portraits, despite all the drawbacks, is so strong that some general principles may not be out of place. It is best for the amateur, unless he have a specially constructed glass house, to make his portraits in the open air. For a background, stretch a gray cloth upon a frame by means of rings and hooks. With rapid plates, a head-rest is not necessary. principal thing to be attended to in outdoor portraiture is the selection of a suitable place to pose and light the subject. Some of the best results have been obtained upon light cloudy days, as the contrasts in light and shade are not so marked as they would be in a very strong sunlight. A threequarter view of the face is the best, and the eyes of the sitter should, if possible, be directed towards some dark object. A very good plan is to pose the sitter or group in the shadow of a building, with the sun, of course, behind the building, but at a sufficient height to allow its rays to strike the foreground a few yards from the sitter, so as to nicely light up.

When groups are taken, it is a good plan to have them represented as performing some action. If in a landscape, as forming some necessary feature of it, nothing looks more awkward than to have the group staring out of the picture as if they had nothing to do with it.

A little ingenuity in the management of backgrounds will enable the amateur to make many an effective view of domestic life. Two sides of the background are necessary to represent the interior of a room, and a few well-chosen accessories, in the shape of appropriate common objects, will make charming pictures, näive and natural; but do not for any reason introduce the conventional balustrade and column, with the stiff, unnatural vase of flowers.

In the next chapter, I shall endeavor to give the methods of development by which the objects the images of which have been impressed upon the sensitive plate may be called forth into being.

SUMMER SCHOOL OF PHOTOGRA-PHY AT MOUNTAIN LAKE, MD.

A RECENT interview with Prof. Charles F. Himes, who is organizing the summer school of photography at the above-named place, resulted in filling us with enthusiasm equal to that of his own. Himes read his programme to us in its full details, and from the pamphlet which he is about to issue, the manuscript of which we have seen, we judge that he means to leave no stone unturned that will make the school useful to the students. The beginning of the work will be in the direction of printing processes commencing with the blue process, magic photographs, leaf-prints, and afterwards silver printing. The variety of requirements needed by the students will be supplied at low prices, and of the best quality, including mounts, paper, etc. The students will be allowed to retain their own prints. Tney will also be expected to provide themselves with note-books, and to submit to rather stringent regulations. The course will last two weeks. After the printing process is well understood, negative making will be pursued. Bad negatives will be provided. Good negatives will also be on exhibition, of various kinds. exchange branch will be established, and lantern exhibitions will be held in the evenings, of positives made from the negatives of pupils and others. There will also be an exhibition of cameras, albums, photographic books, and examples of work, together with everything else that can be conceived of to add to the instruction and pleasure of the members of the class. The arrangements will be most complete, and their practice fascinating to the highest degree. We wish the scheme great success,

and that from it will grow summer schools of photography all over our country, another season. We are sure that this first one will be more than an experiment. It will be a grand success. We are certain of this because of the talented and energetic head who for twenty-five years has been one of our most enthusiastic amateur photographers.

ON THE SENSITIVENESS OF DRY PLATES.

BY DR. S. C. PASSAVANT.

THE subject of the relative sensitiveness of different dry plates has been frequently discussed, and one often finds the wish expressed that manufacturers would mark their plates according to their rapidity compared with wet collodion plates; in fact, some dryplate makers have begun doing so.

I consider this a mistake. The consequence is that one finds in the market plates marked "thirty, twenty-one, and ten times as quick as collodion," and if one compares these three brands, he will perhaps find that the plates marked "ten" are more sensitive than those marked "thirty," and at the same time each manufacturer has marked his plates according to his best knowledge and in good faith.

What is the reason of these paradoxical results?

We have no standard collodion, and there are hardly two collodions that work alike; in fact, I know photographers who expose nearly double the time that others do, both working with wet plates. This, then, is not the only reason. The main reason is that the relative sensitiveness of dry plates, compared with the wet, is not constant, but varies with the amount of light—i. e., the stronger the light, the more sensitive the dry plate, compared with collodion, and the weaker the light and the longer the exposure required, the smaller is the relative sensitiveness of the former.

Take, for instance, a very sensitive dry plate, with which a good instantaneous view, under favorable conditions, can be made in from one-fortieth to one-fiftieth part of a second. To obtain an approximately equal result with a good collodion plate would require at least

two or three seconds, so that in this case the dry plate would prove from one hundred to one hundred and fifty times as rapid as the wet. Now, with the very same plates, make a portrait under the skylight; here the dry plate will require say two seconds, while the wet, under the same conditions, will have to be exposed sixteen to eighteen seconds, so that the former will this time prove eight or nine times as quick. In a very dark wood, or for an interior, the difference of the two plates will be a still smaller one, and the dry plate will here only prove three or four times as rapid as the wet. How ought one to mark this very sensitive dry plate? One hundred, nine, or three times as rapid as a wet plate?

This also explains the contradictory results above mentioned. Some manufacturers test their plates for an out-door view, others under the skylight; some use very powerful, others less powerful, lenses; some use large, others small, diaphragms; and they will, therefore, in one case find their plates thirty times, in the other about eight or ten times as quick as collodion.

The reason why the sensitiveness of the dry plate increases with the amount of light, respectively with the shortness of exposure, one cannot tell with certainty. Theoretically, the following may be given as the reason therefor.

In a dry plate, the action of light converts a certain amount of the silver-halogen into silver-subhalogen, and halogen is freed. With the wet plate, most likely the same process takes place; but there the free halogen, coming in contact with the solution of nitrate of silver, instantly forms fresh silverhalogen on the surface of the plate, which, in statu nascendi, is very sensitive to chemical reactions, and by the action of light is again converted into silver-subhalogen and free halogen, which latter again decomposes nitrate of silver, and so on. Thus, with a wet plate, a constant renewal of silver-halogen takes place where this has been reduced by light, and this will quasi intensify the negative, which intensification will take place in a higher degree the longer the exposure may be. In the dry plate there is no nitrate of silver which can renew the silverhalogen once decomposed; the light has to

penetrate the film to act on the silver-halogen, which, if the light is weak, takes considerable time. Thus, with the wet process the picture is produced on the surface of the film, and is formed from the coating upward, while with the dry plate the picture is produced from the surface of the film downward towards the glass. But I am getting into theoretical speculations which lead me too far from the object of this article.

Some readers will perhaps ask here: "How ought one to mark the dry plates, so that everyone can have an approximate idea of their sensitiveness, and guess close to the right time of exposure, even if he never worked the brand of plates before?"

The best means for testing and determining the relative sensitiveness of dry plates, up to the present time, is by a sensitometer, either Vogel's or Warnecke's; and I would advocate that every dry-plate maker should test his plates with one of these instruments, and mark the packages accordingly. I am well aware that these instruments have many pros and contras, which to discuss here would lead too far; but as long as we have no better means, they should most decidedly be used. But marking sensitometer degrees by the manufacturers alone will be of very little use if the customers are not acquainted with these instruments, and know what, for instance, "15 or 20 Warnecke" means. If not practically, they ought at least theoretically be acquainted with the sensitometers. Our photographic journals will have to explain these instruments, and everyone ought to read these journals, and profit by them.

INTENSIFICATION.

INTENSIFICATION, not intense suffocation, was what I was after the other night, as I snuffed the aspiring flame of my oil lamp and went to work.

Laying an under-exposed plate in the usual bichloride of mercury solution until its surface attained the density of city milk, I washed it thoroughly.

Soda takes the place of ammonia in the pyro developer, why shouldn't it do so here, thought I, so I tried the effect of a weak soda bath on the mercury-coated plate, and after leaving it in the solution for a few

minutes, a rich, brown-toned negative was the result. A number of experiments lead me to think a strong solution of sulphite of soda works best, producing clear black tones of good printing quality. I hunted up a number of my "first attempts," and by the above method saved a good many of them. This may be old news to some of your numerous readers, though quite new and highly satisfactory to the writer, who thinks it is worth a trial, anyhow.

W. N. JAY.

THE RIGHT SORT OF PLATES FOR VIEWS.

BY D. BACHRACH, JR.

As the season is rapidly approaching for outdoor photography to become the rage, it will pay those who follow that branch to give some attention to the hints herein given. It is a settled fact that no one would now think of dragging out any wetplate apparatus for landscape work, in spite of the snap and brilliance that good collodion plates possess, and the question of the most reliable sort of plates for such work is an important one. I have developed a large number of views for amateurs and others, besides my own work, and I often exclaim, "Why will most men use the extremely sensitive plates for all subjects, and get flat, over-exposed effects in most cases?"

Now suppose the subject is a landscape, with much distance and sky. If a Cramer, Eastman "Special," or other equally rapid plate be used, the chances are, in many cases, that a very little over-exposure will utterly ruin the effect. In strong lights such plates are fit only for animal subjects, or drop-shutter exposures. Where there is much sky the solarization from over-exposure is fatal to all good printing qualities. Of course, in the hands of an expert they will succeed. I have secured the very best results with plates that allowed a little latitude of exposure and will still develop with vigor and snap. Such plates, I find, are Carbutt's "B" brand, which, though too slow for rapid studio work, give nearly all the good qualities of a wet plate in landscape work. In a strong light they require about one-third the exposure of a wet plate,

while in a very weak light, nearly as much exposure as for collodion may be given without harm. My advice in this matter has been followed with profit by many amateurs as well as professionals, and a view made on one of them has qualities utterly lacking in many of those on the more rapid plates. They develop clean, are not so liable to stain, and the skies are not solarized out of sight in case of a little overexposure. Should the soda developer be used, one-fifth or one-sixth of the exposure of a wet plate is more than sufficient, but I prefer a slower developer, one like that recommended by Cramer in the directions accompanying his plates. I always feel safe in going out to make a view with one of Carbutt's "B" plates, and I hope the quality will be maintained.

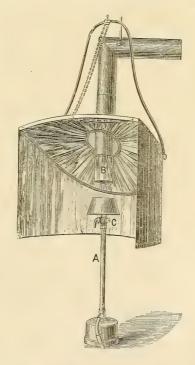
DR. VOGEL'S PROGRESS IN PHO-TOGRAPHY.

A VERY gratifying reception has been given to Dr. Vogel's excellent book, and it continues almost like an ovation. This is just as well as generous, because of the great popularity of Dr. Vogel in this country, and because of the actual excellence of the book. Few living men have done more to uphold and advance photography than Dr. Vogel. Few books of the many that have been issued to assist in that work, are more worthy of patronage than his Progress in Photography since 1879. To renew the interest of some who may have forgotten it, we append below a few extracts from this excellent work, that a fresh idea of its practicability and usefulness to everybody may be had. This is for amateurs. Let the Doctor's noble work continue to be generously patronized:

"Photography by Gaslight.—Mr. Law, of Newcastle, has been taking portraits by gaslight with excellent success for some time; gelatine plates of course being used. His apparatus consists of a very powerful burner and suitable reflector. It is arranged as follows: The burner stands on an iron rod with a foot, A, four feet six inches high. Over the round burner is a chimney whose lower end B, is made of

mica, which is not affected by heat. A cock, C, serves for controlling the flow of gas, being so arranged that the flame is not entirely put out on being turned down, but continues burning. The burner is made after Wighan's model; it contains sixty-eight openings, and gives a light of 1250-candle power (?). A Siemens' (Dresden) generative burner would do the same, and these are manufactured up to 1000-candle power.

"The reflector is made of galvanized iron and strips of silvered glass; the top part gives the top light, and the side part the side illumination. It hangs on an iron rod by which it may be turned in any direction, and its width in front and the height of its sides are forty inches. When about to be used, its upper part stands about



six feet from the ground. A burner of this power so close to the sitter is disagreeable, the light and heat being felt. To modify this, Law erects a screen of blue glass between the apparatus and the sitter, measuring about 40 x 40 inches; this cuts off about one-fourth of the light. The exposure for

a carte-de-visite is eight seconds, and for a cabinet twelve or fifteen.

"Portrait Taking in Ordinary Rooms, after H. P. Robinson .- Before the introduction of the marvellously sensitive gelatine plate it might be said that "portrait taking without a skylight " virtually meant working in the open air, with all its accompanying evils. Now, however, by the aid of highly sensitive plates, which render a powerful illumination superfluous, portraits may be made, not only in the open air, but even in ordinary rooms, with the best success. I have even seen portraits made in rooms that were better than those made under the skylight, the reason doubtless being that the former were free from the stereotyped, model-like appearance of the latter. Then, too, the work is undertaken now-a-days with more artistic knowledge than formerly; the lighting of the sitter is better understood, and satisfaction not given by monotonous lighting of the features, relieved by an equally monotonous background.

"The simplest form of picture that may be made in a room is the bust, showing only the head and shoulders. Frequently the operator will be cramped for want of space, finding it impossible to get far enough back for full-lengths and three-quarters, the bust then offering itself as the only possible form.

"The best room for this purpose is a corner-room, with a broad window on one side and a narrower one in the right-hand corner. There the lighting arranges itself. The sitter should be placed near the principal window, and only sufficient light admitted from the other to relieve the shadows. Any modification of light and shade may thus be obtained. If there is no smaller window, a reflector may be used to illuminate the shaded side. A light stand supporting a sheet of paper, or a screen covered with white cloth or paper, serves a good purpose. Another plan is to place the sitter at ten to twelve feet distance from the window, the camera being near the window, either at the right or left, taking care to choose its position so that there may be a shaded as well as a lighted side of the

sitter, the front light alone giving a flat, monotonous result.

"Certain bold effects of light are more easily made in a room than in a studio; in fact, they frequently form themselves. Such are silhouettes and Rembrandt effects, which may sometimes be made with but little trouble; care must be taken, however, to shield the lens from light which might fall directly upon it and fog the plate, particularly a gelatine one.

"Groups may also be made in rooms where there is sufficient space. A group taken in a parlor in accustomed attitudes is far more natural than the hackneyed picture of the studio. Gelatine plates, when used with aplanatic lenses (the Euryscope, etc.), will render success possible, the depth of focus of this form of lens being a great point in its favor. The natural background will often be the best, but spotty high-lights must be guarded against. The bright white frame of a picture appearing behind the head of the sitter may produce a very bad effect, as may also white marble mantels, shining porcelain, etc. Such objects must either be removed or thrown into shadow. Many varieties of carpet (not those with brilliant colors) make a good background.

"A pleasing effect may be made by arranging the dark side of the background behind the lighter side of the sitter, and vice versa. Some corner of the room will often afford such an effect, or it may be artificially produced by setting a screen with two folds behind the sitter. If the latter be lighted from the side, the screen will be light behind the shaded side of the face, and dark on the other side."

Mr. Hart, of London, has just made some small developing baths out of celluloid. They are very light, very clean, resemble ivory, and are highly resisting. For use in the photographic laboratory they seem to be all that could be desired, as it is said that they are not attacked by the liquid of the bath. This is a point that should be examined with care; alkaline solutions probably would, after a certain time, decompose the celluloid, and, moreover, this substance is highly combustible, and dangerous for the stores that deal in articles made of it.

THE PHOTOGRAPHER'S DREAM.

BY H. S. KELLER.

PHOTOGRAPHICALLY speaking, The artist has a load, Who climbs the steep declivity Of the artistic road. There's the maid in pucker garments, With freckles on her nose, And the lad in knickerbockers, With the shiny copper toes. Ah! the aunties, so adoring, And the baby, all in white-Oh! it makes the artist weary When this army heaves in sight. Then the grandpapa so tremulous Drops in for a sitting now, With grandchildren strolling after In multitudinistic row. Ah, the duderette emphatic Lifts the shingles from the roof, And declares it's " very horrid!" When she gazes on the proof. Next the gent in lower garments Fitting closely to the skin, Says the weather is so charming He will have some made on tin. Oh, we hung him in the dark-room, Victim of that fatal saw, Said "He'd rather have a tooth pulled, Than to face the cam-e-raw." Then the big fat man, all oozing From the pelting rays of sun, Wheezily climbs up the stairway Where the operators run. Oh, it made the artist happy, There was rapture in the scene, When the man sat in the chair and said: "Look out for your machine." 'Tis a pleasure just to listen To the aged puns that drop From the lips of gentle patrons Of the photographic shop.

AN ART OPPORTUNITY.

THOSE of our readers who want to be real artists should study art and art journals. One of the best opportunities possible is now given them. The American Art Union, one of the leaders of which is Mr. Wm. Bradford, the prince of good artists, the Arctic explorer, and the first painter who recognized

our art, has been organized for the general advancement of the fine arts, and for promoting and facilitating a greater knowledge and love thereof on the part of the public.

Nearly all of the leading artists of the country, representing the different schools, are enrolled among its active members, and its President and Vice-President hold similar offices in the National Academy of Design.

The purposes of the association are, among other things:

To publish original etchings and engravings of the highest grade.

To issue an illustrated monthly art journal, of which a leading feature will be the contributions of the artist members, both in the form of papers and illustrations.

The subscription to the Art Union is five dollars per annum, and each subscriber for the present year will receive at the time of payment:

1st. A season ticket to the exhibitions of the Union.

2d. A proof before letters, on India paper, of the etching of the year, by Walter Shirlaw, from Eastman Johnson's picture "The Reprimand." This etching is mounted upon heavy plate paper, and is of a size (13 x 16 inches) and quality such as the leading dealers sell at from twenty to twenty-five dollars.

3d. The illustrated Art Union, which will be issued monthly, for the current year. (The price of the journal to non-subscribers will be \$3.00 per year.)

4th. One-half of the subscription will be set apart for the formation of a fund, to be expended for the joint account of the subscribers in the purchase of works of art, which will be held in trust until the end of the year, when they will be delivered unconditionally to the whole body of the subscribers represented by a committee. This committee will then make such disposition of the works as may be determined by the majority of the subscribers, each of whom will be entitled to send in one vote as to the manner of disposal.

There are several feasible ways in which to dispose of the purchased works. They may be sold at auction or private sale, or at an auction which will be attended only by subscribers, and the proceeds divided equally among all the subscribers, or they may be divided among the bodies of subscribers of the several States, each one to receive its quota according to the amount of subscriptions from such State. The several State Committees might then dispose of the works in one of the aforenamed methods, or present them to form nuclei of new public art galleries, or additions to some already in existence. Or they may be distributed among the subscribers by lot.

In enumerating these various methods of disposition, the Art Union expresses no preference of one above another; its desire and interest are only that the disposition of the collection shall be equitable and satisfactory to all concerned.

No exorbitant prices will be paid to the artists, but such only as are generally obtained at the studios for a similar class of work, and the prices to the subscribers will be exactly those paid to the artists.

The latent taste for art that has existed in the country, has been developed in a wonderful degree during the past twenty years, until there is scarcely to be found a hone in any section that does not contain some form of art production. It is believed by the projectors of the American Art Union that the time is at hand for such an enterprise, and that the lovers of art will be eager to avail themselves of its benefits.

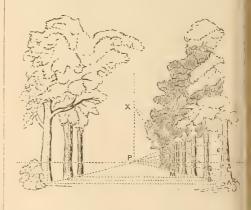
A subscription to this grand project (\$5) and the Philadelphia Photographer for 1884 can be secured by sending us \$9.

GIHON'S PHOTOGRAPHIC COL-ORIST'S GUIDE.

Another useful book, which for some reason or other was dropped from our catalogue this year, is the last work of the lamented John L. Gihon. Not only is it an excellent work for the colorist as a guide, but as a guide to the retoucher, and to workers in the various departments of the art. The chapter on "Photographic Art" should be read by every worker under the skylight. We give a hint or two from its pages as an example of its usefulness, and of the terse way in which the talented author put things. His death was a great loss to photography,

but his works live after him, and will do so for a long time to come. The last chapter alone, on "Rudimentary Perspective," is worth to old photographers or amateurs, the price of the whole work. What follows is one page from that chapter:

"To Represent an Avenue of Trees in Perspective.—Establish your distance between the two first, which you will mark A and B. From the point A raise a vertical line; mark on this line the equal distances C, E, F, H, etc.; from these points draw lines to the point P. From the point A, and through the point G, draw a line till it intersects a vertical line drawn from P; the points I, K, L, thus procured, will show the places for the third, fourth, and fifth trees. To obtain a still greater number, draw a line from M, the base of the last tree, to X, and proceed as before.



"Where a landscape background is introduced, and is made up principally of trees or of indefinite forms, mistakes in drawing will often pass unobserved. When houses are introduced and badly managed, even the uneducated eye will detect that something is wrong, without being abe to explain the difficulty. The most glaring faults are generally found in the setting of the roofs upon the buildings."

Mr. Baden Pritchard has just acquired a photograph made in 1827, by Nicephore Niepce, on his arrival in England and presented to the Royal London Society.—Dr. Phipson, in Paris Moniteur.

SOCIETY GOSSIP.

Photographic Society of Philadelphia.—The regular meeting was held on Wednesday evening, April 2, 1884. The President, Mr. Joseph W. Bates, in the Chair. Forty-five members and eight visitors were present.

After the reading of the minutes of the last regular meeting, the Excursion Committee reported that a tugboat excursion on the Delaware was planned for the 5th inst., also another single day trip on the 26th inst., and a longer trip about May 19th.

Messrs. Alfred P. Edge, Edward R. Sharwood, and William T. Elliott were elected active members of the Society, and six new members were proposed for election at the next meeting.

The resolution offered by Mr. Coates at the March meeting, amending the By-Laws relating to the election of members, was discussed, and it was finally agreed to amend the By-Laws so that names of proposed members should be referred to a committee of nine on Election of Members, and be subsequently balloted for by the Society, six black balls excluding a proposed member.

Mr. Bell exhibited a large photograph of the Washington Monument, taken on a gelatine dry plate, by Mr. Prince, Photographer for the U. S. Treasury at Washington In this picture the white marble column, full of detail, was beautifully shown against the sky—an effect which it had been claimed dry plates could not properly produce.

Mr. Carbutt also showed two large pictures, showing the perfection to which the manufacture of dry plates had been brought. One was a view of "Bank Row," on Chestnut Street, below Fifth street, in which white marble buildings in full sunlight were successfully taken on a Carbutt "B" plate, with an 8-inch Morrison wide-angle lens, the negative being the work of Mr. Levy. The other picture was an interior of St. Agatha's Church, Thirty-eighth and Spring Garden Streets, taken with a Zentmeyer lens on a Carbutt Special plate.

A large transparency of the Capitol at Washington, and two fine large portraits, all by Mr. Gutekunst, and on gelatine dry plates, were shown.

Mr. Geo. A. Cooke, a visitor, exhibited a number of colored photographs known as "Bonnaud-types," which were much admired. Washes of various colors were first put upon a piece of paper, upon which was sketched the outline of the different parts of the picture. A transparency was then made by the usual process upon a film of gelatine, which was afterwards transferred to the sheet of colored paper. The colors, of course, were visible through the transparent parts of the gelatine film, and the dark portions gave the effect of the necessary shading. The process was considered both ingenious and effective.

Mr. John G. Bullock was added to the Lantern Exhibition Committee, and the Exhibition was announced to be held April 16th, at Association Hall.

On motion, adjourned.

ROBERT S. REDFIELD, Secretary.

AMATEUR PHOTOGRAPHIC SOCIETY OF PHILADELPHIA—The second monthly meeting of the Amateur Photographic Society was held in the assembly-room of the Club, 907 Filbert Street, President Roberts in the chair.

The minutes of the preceding meeting were read by the Secretary, and approved.

The Excursion Committee reported that the first excursion of the Club had met with the entire approval of those who participated in it. A number of interesting objects were taken, and much useful photographic information gathered.

The Executive Committee acknowledged the receipt of a number of books and photographic material from Messrs. E. & H. T. Anthony, from the Chicago Dry-Plate Company, from the St. Paul Dry-Plate Company, from Mr. W. H. Walmsley, and from Messrs. Wilson, Hood & Co.

A motion was made to dispose of the package of St. Paul Dry Plates to the highest bidder. The motion was seconded, but was objected to by several members of the Club.

Mr. Lowenberg urged that it was entirely contrary to the intention of the sender to so dispose of the gift; that the plates were sent by the Company to be tested by the Society, and that the opinion of the members as to the quality of the plates was solicited,

and that if they were consigned to any special individual, he could do what he pleased with them, and give no report of their merits.

Mr. Lowenburg further remarked that all apparatus, plates, etc., were given to the Society not for the individual benefit of the Society, but with the purpose of exhibiting their merits, and that if the Society accepted the gifts they were in duty bound to use them in this spirit.

He closed by moving that the Executive Committee be instructed to test all plates or other matter submitted to the club, when the amount was not sufficient to supply each of the members, and that they report the result of their investigation. The motion was passed. A motion was also passed to invest the Executive Committee with power to contract debts not exceeding five dollars in the aggregate for the month.

Mr. Haines offered an amendment to the By-Laws, by which the assessment of an initiation fee upon new members should not go into effect until the June meeting, so that members entering prior to that date need only pay the assessment imposed upon original members.

Mr. Haines presented his resignation as a member of the Executive Committee, which was accepted by the Society with regrets. Mr. Stewart was elected to fill his place.

A recess was taken, during which the members exhibited a number of slides of their own make. The lantern employed was the Queen Improved Lantern.

A number of instantaneous shutters were shown, and also photographs and transparencies by the members.

On motion, the Society adjourned.

ROCHESTER PHOTOGRAPHIC ASSOCIATION.

—Regular meeting, Monday evening, March
10, 1884, Vice-President Nelson in the
Chair.

After the usual routine business, Messrs. Dumont and Reeves were elected associate members of the Association.

Mr. Mawdsley, photographer, from London, England, was presented by Mr. Wardlaw as a visitor.

On motion, he was accorded the privilege of the floor.

The Question Box Committee, Messrs-Bowdich, Learned, and Williams, had the following questions to present to the meeting:

- 1. Are small blisters detrimental to the keeping qualities of albumen prints?
- 2. Is it desirable to use small stops in connection with dry-plate work?

Question 1. Mr. Bowdich did not think such small blisters hurtful; they dried down all right, and he believed that the prints kept just as well.

Mr. Nelson agreed with Mr. Bowdich. He had never seen prints show signs of fading because of blisters, and when the blisters were not too large or broken, he did not believe they affected the prints injuriously.

Mr. Pomeroy had noticed prints, after being in the show-case for some time, show decided marks of fading where there had been small blisters. He wished to know if these faded spots would have shown if the prints were placed in the album instead of exposed in the show-case; he would like to hear from Mr. Wardlaw on the subject.

Mr. Wardlaw: A long time ago my attention was called to some prints with round greenish-yellow spots on them. As the prints were fresh (in fact, only a day or two old), it was a mystery to me what could have produced the discolored spots, but, on investigating, I found that every place where these little albumen blisters had been was, on the application of heat—for we used a hot press then, instead of a burnisher—burned to a greenish-yellow mark at first, and afterwards rapidly faded.

Mr. Monroe said that these blisters were undoubtedly cells filled with hypo.

Mr. Wardlaw: The albumen film is waterproof, and the underside of the blister is coated with hypo, and the air in the blister intervening, prevents the water washing out the hypo, which, fading, shows itself often immediately on the application of heat. The best remedy he knew of was to use salt in the first washings after fixing, and then, if blisters still showed, to open them by pricking.

Question 2. Mr. Williams said that he used a stop suitable to the subject to be treated; if he had an interior to make which

required all definition, possibly he would use a very small stop.

Mr. Wardlaw hoped that Mr. Mawdsley would favor the members of the Association with his views, not only in regard to the stops suitable to different subjects, but to working in general.

Mr. Mawdsley said that he was pleased to be present at this meeting, and to hear and take part in the discussion. If we, in landscape work, use too small stops, we lose in a great measure the beauty of the picture, by the want of proper atmospheric effect; on the other hand, we may spoil an otherwise pretty picture by too much diffusion of focus; there is a happy medium which is right. If, as Mr. Williams says, an interior is the subject to be treated, then by all means use a small stop, so as to secure as much definition as possible, but in landscape work, in extended views, be careful not to stop down too much, for by doing so you bring the distance into undue prominence.

Mr. Learned said Mr. Mawdsley's point was well taken; atmospheric effect was the desirable thing in landscape work; the effect is lost by stopping down.

Mr. Wardlaw: In fact, you make a pre-Raphaelite picture of it.

Mr. Pomeroy: Is it desirable, in portrait work to stop down?

Mr. Fox thought not usually; you will often meet people who object to pictures being too sharp; pictures should not be made too wiry.

Mr. Wardlaw believed in considerable sharpness, especially in the case of ladies with frizzed hair, and in three-quarter or whole length pictures.

Several questions were postponed until next meeting.

Meeting adjourned.

W. J. LEE, Secretary.

ROCHESTER PHOTOGRAPHIC ASSOCIATION.

—The regular semi-monthly meeting of this Association was held on Monday evening, February 25, 1884, President Fox in the Chair.

The minutes of the previous meeting of the Association were approved as read.

After the usual routine business was dis-

posed of, the topics for the evening's discussion were presented.

It was suggested by a member that the questions in the Box be left over until the next meeting for discussion, as Mr. Wardlaw had promised to give a stereopticon exhibition of lantern slides made on the new transparency plates.

Mr. Wardlaw thought the questions from the Box were really the principal business of the Association; they should be first discussed, as some members might be anxious to hear the discussion. There would still be time to show the lantern slides afterwards.

The President said that as there was no Committee on Questions appointed at the last meeting, the questions would be read off and any remarks from members would be in order.

Question 1. Which form of development would an amateur be most successful with, pyro or oxalate?

Mr. Learned said, speaking for the amateurs (whom he thought mostly used oxalate), that they would find the pyro the best developer. Oxalate seems the most simple to work, but after giving both a fair trial he much prefers the pyro developer.

Mr. James Inglas (who was present as a visitor) was asked to give his opinion on the subject. He said: I was at first a firm believer in the oxalate developer for dry plates, but I have changed my mind now regarding it. I find that pyro gives more latitude in the development than could be obtained with oxalate. The developer will allow of more modifying; if one formula of pyro will not work quite satisfactorily on a certain brand of plates, it can be made in most cases to work with slight changes, and produce the finest qualities in the negative. I should think pyro would suit amateurs much better than any other form of developer.

Mr. Wardlaw said that he had come across plates that would not develop satisfactorily with the pyro developer; with such plates, whether amateur or professional, they would of course succeed better with oxalate, but if amateurs used some of the best brands of dry plates, and used pyro and stuck to it, they, in the long run, would be

much more successful. With pyro they could get negatives with good printing qualities. A negative of this sort is easier to judge of as to intensity; with oxalate developed negatives they were obliged to have more density for two reasons. Oxalate developed negatives lose more in fixing than those made with pyro, and the color not being as non-actinic, extra density was required, which makes it harder to judge when the development is carried far enough. Pyro developed negatives have more "tenderness" than those developed with oxalate.

Mr. Miller thought amateurs should use the formulæ sent out by the makers of the plates used. He had known of photographers who changed plates continually, yet stuck to one form of developer; this he did not think was doing justice to the plates.

Mr. Inglis hoped soon to see a universal developer in use. On his recent visit to Chicago, he said, he was favorably impressed with a formula he saw used there, which he thought would ultimately be universally used.

Question 2. Which is best to fix prints, seven or fifteen minutes?

Mr. Pomeroy thought seven minutes long enough.

Mr. Wardlaw said he thought the sooner prints were removed from the hypo bath the better, provided the prints were of the right tone and not too dark; three minutes was the time he usually allowed for fixing, though he had used imported brands of albumen paper that required eight to ten minutes to fix; the brand of domestic paper he used (Hovey's special) would fix in three minutes in the same fixing solution.

Mr. Inglis: What is the advantage in fixing prints so quickly?

Mr. Wardlaw said that the purity of the whites was better preserved, and the prints were brighter by short fixing.

Mr. Inglis thought much would depend on the condition of the silver in the prints, and the gold in the toning solution. He generally allowed ten minutes in a warm solution of hyposulphite of soda.

Mr. Wardlaw: How warm do you use your fixing bath?

Mr. Inglis: About 100° F.

The President: Don't you think warm hypo would cause yellowness in the prints?

Mr. Inglis: No.

Mr. Wardlaw: What advantage is there in fixing fifteen minutes?

Mr. Inglis: It is better to leave them in long enough to insure thorough fixing.

Mr. Wardlaw: If the first prints taken out are examined, it is easy to tell whether they are fixed or not by looking through them. Some prints require longer fixing than others.

Mr. Inglis: I use a fixing bath of saturated solution hyposulphite of soda one part, water seven parts; add warm water to make it 100° F.; fix the prints fifteen minutes.

Mr. Wardlaw uses hyposulphate of soda (crystals) one pound, dissolved in water.

Mr. Nelson thought slow fixing was best, as more time is thereby given to move prints while in the solution.

Question 3. What is the best light for the developing room?

Mr. Inglis said he favored the orange and green light combined. He had recently seen it in use in Chicago; the dark-room was so well illuminated that fine print could easily be read in any part of it, yet the plates used showed no signs of fog.

Mr. Wardlaw said he thought the ruby was the only perfectly safe light for the dark-room where very sensitive plates were used. He, for one, preferred a strong light immediately in front of the developing stand and no light behind, on the same plan as a retouching frame, and for the same purposes

The President always thought the orange and green would never combine.

Mr. Inglis said the benefit of a good general light was that it enabled the operator to see better everything about the darkroom. Orange and green gives fine illumination.

Mr. Wardlaw said that a modern darkroom should only contain the plates and
holders to be used, on one side of the room,
and a developing sink on the other side, directly in front of the light. On this sink
should be kept the dishes and developing
solutions; with the washing and fixing
boxes to the right in the sink. In this way
the room can easily be kept clear. Having a

grooved fixing box the right size for the plates used makes it very convenient where a number of plates are to be developed at one time.

Question 4. What is the best plan to take pictures of babies and children?

Mr. Inglis explained his manner of taking babies' pictures. He used a chair, placed so that the child could be held from behind, while the child could be fastened by a string or otherwise, the child's attention being obtained meanwhile by the operator at the camera.

The President thought no plan succeeded so well with children as being able to amuse them. Many operators fail for this reason; most children can be taken if sufficient patience is used. He had known a photographer, who, after making several failures in trying to take a baby's picture, pinched the child, causing it to cry, so that the mother would take it away.

Mr. Wardlaw thought that the photographers who made the best babies' pictures were those having the most winning way with the children. As an example of them he mentioned Mr. Kent, of Rochester, and Mr. Landy, of Cincinnati. He thought these men could claim a large measure of their successful baby pictures as a result of good management with the children.

Mr. Wardlaw then gave the members a stereopticon exhibition of slides made by Mr. Roche, of New York. These slides were mostly made on the new albumen transparency plates of the Eastman Dry-Plate Company. They were very much admired.

On motion, Mr. Wardlaw was thanked for the amusement as well as the instruction derived from the exhibition.

On motion, it was decided to have another stereopticon show of slides made by members of the Association.

Two 8 x 10 prints shown by Mr. Wardlaw, which were made on gelatine bromide paper were also greatly admired.

The meeting then adjourned.

W. J. LEE, Secretary.

Do not fail to read the Society Gossip through. Some good hints this month.

A DISCUSSION ON PRICES.

(Continued from page 126.)

IV.—To BE CONTINUED UNTIL THERE IS A REFORMATION.

Answers from the Audience. - Our sermon last month on this subject has created no little interest, of which we are glad to learn. On the corner of our desk, while we write, is a huge stack of responses from all parts of the country, and some from parts out of the country. It makes us feel, already, that we have had success started with our agitation of the subject. Not only this, two or three of our wise contemporaries have taken up the cudgel with us, and are creating excitement on the subject. We expect to see some little excitement on the part of the sensitive ones, and hereby and herein express our absolute willingness that anybody whom the shoe pinches may freely feel hurt. We want this thing to go right; but, as we said in the beginning, we do not look for immediate results. We are sure, however, that the thing is working right, and it is only a question of time when the low-priced man will grow tired, and starve from want, and will quietly disappear as a faded leaf in autumn time. It is no new thing for people to work against each other. In the time of the ancient Greeks, it was a most difficult thing to unite the people. Each man wanted a miniature theocracy established in his own household, and in time of war it was almost impossible to organize the people to resist the foe. This was not altogether due to jealousy, but due to the disposition on the part of the Grecians to prefer quietly to have their own way. They could not understand why any of them should make a sacrifice for the good of somebody else. To-day, as we can testify by sad experience, among the Bedouin Arabs the same sort of opposition occurs with a similar desire to establish theocratic governments at home. But here, however, the result is different. The chief and governing principle of the Bedonin seems to be that of the large majority of photographers to-day-"against everybody, and everybody against me." The consequence, there never was a more starved, hungry set of wretches on

the face of the earth, than the Bedouin Arabs. Photographers, please take warning. We step aside now for a month, from the discussion of this subject, in order to give place to some of the answers from the audience who have been stirred up by our sermonizing thus far. Such words given from so many must work good. Having now started the work, we await results for one month more, then we shall have more to say. The leaflet suggested in our last issue is being prepared, and will be duly announced; possibly next month.

I believe the dignity, respectability, and success of photography find their pulse in price. They influence the quality of the work and ambition of the worker. The tendency is to lower prices, which means, among other things, poorer work. Many good men are pulled or pushed into meeting prices made by their inferiors; and many of our proudest cities and prominent photographers are a reproach to themselves in this matter.

It has been shown that it is out of the power of our Association to regulate the evil. Men will not be dictated to, or be controlled by legislation. In the language of TILLMAN JOY, we can "Resolute" till the cows come home, without effect, while an appeal to pride or shame might reach. My idea is to publish the names of photographers, and the prices they get for cabinet-Whether it would be size photographs. wise to take them city by city, in continuous numbers of The Philadelphia Pho-TOGRAPHER, or to embody the matter in pamphlet form at once, and offer it for sale, I am not competent to say; but that it would be good information and salable, I do believe I think it would be of more interest than a description of prominent galleries, and I believe such a book would be largely bought.

Where I think the chief benefit would come, would be in stimulating a pride that would bring the lower strata right up. My idea was, that for such cities as were cited, the top and bottom prices be given, with the names of the parties. It would at once stand as a roll of honor and a black-list. Most men have pride—some have shame.

I think those getting honorable prices would feel applauded and strengthened in having their names given in a matter that would reflect credit upon them. I think many who are working for disreputable prices might be induced to reform through a desire to rise in the scale of respectability—a few might be shamed into it. No better or surer means could be taken of showing the status of the art throughout the country. The showing it, I think, might be a means of starting an improvement.

True, the low-priced men, desirous of advancing their prices, might find advantage in having the list of first-class prices to refer their customers to. You have correspondents in all cities you would care to cite, who would readily give you a list.

I feel pleased that you take my suggestion as worth something; it confirms me in the value of the project as a means of getting at a great evil, and of doing something to reform it. I will be glad to do all I can to help push.

J. F. RYDER.

CLEVELAND, O.

I have given the subject of prices much thought, and don't see how we can make prices, that will be lived up to, for each other. I think there might be an association established in every State, and I do not see why it could not be as well, or better than a national affair; that no member shall make cabinets for less than four dollars, or cards less than two dollars per dozen; and that each member shall give a note for fifty or one hundred dollars, due and payable to the association, when it is proved he broke his pledge of honor, and forfeited his membership. Let this be the lowest graded price for a third-class gallery, seven dollars and three dollars for second-class, and ten dollars and four dollars for first-class galleries. When such a distinction is made in galleries, every true artist-photographer will strive to excel, to make his work command the highest prices, so that his gallery will be classed first; then, instead of every one striving to cut prices, and make cheap work, and degrade his profession, and dishonor his reputation, he will strive to elevate and educate himself and employés, so that his

work and prices will equal the best. To accomplish this, there must be created a photographic board of awards, known as American Photographers' Art Board of Awards, whose duties are to classify the photograph galleries of the United States, to promote and elevate the art of photography, and to establish a bar from galleries making cheap, poor photographs, and passing them off upon an uneducated public as first-class work. This will place photography and the profession where it rightfully belongs—among the fine arts of the world.

C. D. Mosher.

CHICAGO, ILL.

I take pleasure in enclosing a copy of a price-list which hangs in my gallery for reference.

"Harmony" is amongst photographers; "To be or not to be." I don't know why there should not be a friendly understanding club-society amongst us here, there has been, but, oh dear! it was jealousy, pricking each others feathers, etc., and nothing else. I suppose you heard all about it. I have to keep modestly quiet, being the youngest started among the photographers, and have only learned the whole business from hearing and looking on, so it would be rather forward of me to set the ball rolling about prices. The difficult point is here: I know of places ranging amongst so-called first-class, who ask ten dollars for cabinets; if people say they will not pay that much, they take eight dollars, or less. I seldom or never make reductions; the public has a great deal better opinion of you, and you are not the loser by it. Then the most of us have not enough business capacity to manage a gallery successfully. The public of taste and culture will never go to cheap places, and good work can command good prices. My prices are not high, because I am not right down town, and consequently do not pay as high rent as others-four or five hundred dollars a month, which is rather steep. For the common good, I would advise every photographer to compete in surpassing each other in work; the work will command its own value. I could tell you lots more, but will not trespass on your too valuable time.

THORS.

SAN FRANCISCO, CAL.

I am surrounded by cheap operators who are making "stuff" at two dollars per dozen, and "intelligent looking" people often tell us that "the two-dollar ones are just as good as any." Where ignorance is bliss 'tis folly to pay four dollars more per dozen.

A. BOGARDUS.

NEW YORK.

I have no trouble in getting my own good prices, although pictures are made at almost any price in our city. I depend on the custom of persons who are willing to pay a reasonable price for a good article.

G. CRAMER.

St. Louis, Mo.

Brooklyn is no exception to other cities in regard to cheap pictures; the average price for cabinets is four dollars per dozen, and by clubs, one dollar and fifty cents, two dollars, and three dollars per dozen. There are two galleries out of sixty-five that charge six dollars, and two that charge ten dollars for cabinets. I am afraid you have set yourself an herculean task. The undertaking is a very laudable one, and I truts you may meet with success. I have no suggestions to offer as I really can not see how the thing is to be accomplished.

ALVA PEARSALL.

BROOKLYN, N. Y.

The great cry about the so-called "cheap Johns" is nonsense. Take the city of Chicago, or Detroit, where such men as Rocher, Brand, and Randall & Watson are making good work for from two dollars and fifty cents to five dollars per dozen for cabinets. Can you expect the poorer photographers, without reputation or ability, to compete with such men at equal prices? It is a wonder to me how they can even get a sitter. Let our better photographers unite and raise their prices, and, if possible, secure the cooperation of the cheaper class to also raise theirs correspondingly; it may be a difficult task, yet it would result in great good. I have found that the higher your prices and the more attention to pleasing your patrons, the better class of trade you get; and it is far more satisfactory to have fewer sittings per day and take more pains with each sitter, at high prices, than to do

a vast amount of work, most of it unsatisfactory, and at ruination prices. I have often thought that a general union of photographers into State societies might accomplish some good, as follows:

Let each State organize with first, second, and third class membership; said society to meet, at least, once a year, and every photographer to send at least two dozen cabinets for inspection. The members present to be the judges, by ballot; every member to deposit a vote in a box in front of each display; said vote to state whether in the opinion of the voter the artist is entitled to a first, second, or third class certificate. If awarded first class, he shall not make cabinets for less than, say eight dollars per dozen; second class, six dollars, and third class not less than four dollars. Those holding first-class certificates could advertise the same and gain by it; those holding second or third-class certificates could make work at lower prices, if they choose, and gain thereby. This I know would be difficult to bring about, and may be a far-fetched idea; I give it to you for what it is worth. Let the better artists raise their prices and I think the others will soon follow, as they will certainly need a spring renovation before long, and at present prices cannot afford to indulge in luxuries.

W. F. VAN Loo.

TOLEDO, O.

I am glad you have attempted something in that direction, and hope you will succeed. So far as I am concerned, however, I do not suppose it will make any very great difference, as I stick to my own rates, regardless of others. There are in this city, so many cheap Jacks, who are so stubborn withal, that nothing short of an earthquake would reach them, that I never hope to have prices adjusted in any satisfactory manner.

J. H. KENT.

ROCHESTER, N. Y.

I have two prices. The reason is, there are some of the "cheap Johns" in our city. I get next highest price to Mr. Clench; he is the best here in prices, also in work. If I stay in the photograph business here much longer, I shall have but one price, three

dollars for cards and six dollars for cabinets. We have had a hard winter and no money for pictures.

C. A. STACEY.

LOCKPORT, N. Y.

I desire to add my mite to the good cause that you have undertaken, but I must say that I am sick at heart and disgusted with a great many in the profession. They have no principle seemingly, only to cut the throat of their neighbor, thereby committing suicide themselves. I have had a hard fight of it for the last thirty years, from daguerrotype days to the present. My motto always was to keep up the dignity of the art. But what can you think of your neighbor artist when he will copy your work and put it in the market for less price than you value your work at, thereby lowering the dignity of the artist that had all the trouble of making the original negatives. There are a great many people who do not know the difference between the original and the copy. Of course there is a remedy by the copyright, but this is some expense and trouble. What I do not like is the unfair spirit shown by him in attaching his name to the work as photographed by him. If he would say, copied from so and so's artistic work, it would be justice to the original artist. I do not fear competition, but court it, because it is the life of trade. If they will but meet me on the same standpoint I do not fear, but to stab a man in the back, in the dark too, is too degrading for your humble servant to stoop to. This is in reference to my large work, 14 x 17 and 20 x 36 negatives. When I look around among my fellow-citizens and see neighbors who started life at the same time that I did, choosing different occupations in life, and contrast their financial condition with my own, I working as hard, if not harder than they, the common mechanic is in better condition than a great many photographers of the present day, and has more to show for his labor. The trouble is we do not think of our investment in our business and the interest thereon, the rents we have to pay, and our help, the stock and chemicals that are used up, the many dark days that we have to put up with, and the varied experiments we have to make in

order to make things work right. Take all together, we would be happier and feel more noble, and have more respect for ourselves and our fellow artists, if we had better prices for our work.

JOHN REID.

PATERSON, N. J.

SOMETHING DRY FROM THE HUB.

BY THOMAS PRAY, JR.

In the Philadelphia Photographer for April, page 103, I notice what Mr. E. B. Core says with reference to his plates. don't use a Cramer plate; I can find nothing equal to Carbutt's. These I use by the gross, not professionally either. He speaks of his hypo-eliminator. He can do a great deal better with his Eau-de-Javelle than his formula, for what he gives is nothing more or less than Eau-de-Javelle, but the proportions are not correct. Let him take two ounces of dry chloride of lime which has been kept well corked, not the wet stuff which comes out of the pasteboard boxes, and it will pay him to get two or three pounds at a time. Put it in a twoquart bottle, and don't put the cork in too tight, turn it over, roll it around occasionally, let it have a chance to thoroughly dry, keep the air away from it, but don't cork it up so tight that it will blow up. When he wishes to make the eliminator, let him take forty ounces of water (measured), divide it into two parts, and the warmer it is the better. Into one part containing twentyfive ounces, put two ounces of dried chloride of lime, beat it up with a glass rod, and be careful not to stir it with a pine stick or anvthing else which has in it resin, pitch, or anything of the kind. After it becomes thoroughly dissolved put it into a clean kettle, either porcelain or iron, and while it is heating dissolve four ounces of carbonate of potash (in crystals, don't use the granular) in the other fifteen ounces of water. This will readily dissolve; when finished your chloride of lime will commence to boil, use the glass rod till it is white and thoroughly dissolved, then, while stirring it gently, add the carbonate of potash water, bring it to the boil, keep stirring it, boil for about five minutes, turn

it out of the kettle immediately into a large graduate or bottle, cover it up with a glass plate, leave it over night, filter through a loose cotton plug, turning out gradually. There will be a thick mass at the bottom; leave it for twenty-four hours, filter again, and you will have a quart of as fine Eau-de. Javelle as you can purchase, and here at the Hub they charged me eighty cents a quart, till I commenced to make it. Now I make it eight ounces of lime to a pound of carbonate of potash in ten pints of water, dissolving a half pound of chloride of lime in six pints, and the potash in four pints; I boil it fifteen minutes, filter twice, and have just a gallon which costs me forty cents for chemicals, a half hour's time, and a half cent for filtering-cotton. I don't use it on my plates as he does. I have a special tray in which I put two ounces of Eau-de-Javelle and a pint of water. After my plates leave the hypo, or nearly as soon (many take them out, at that), I wash them thoroughly under a tap, put them into the bleaching-bath of alum and oxalic acid for one minute, wash them at the tap again, and the water runs with considerable force, just for a minute, then into the Eau-de-Javelle bath they go for one or two minutes, according as the negative is thick or thin, then into running water for a half or threequarters of an hour, where the water runs over the face of the negative. Now, when I take them out of the box I have a bit of absorbent cotton, perhaps as large as a good-sized hen's egg; this I draw together with my fingers at the top, wet it, and the moment the plate is lifted from the water, wipe off, if you choose, with the wet cotton, the face of the negative film side, until it is perfectly smooth, hang it up to dry, varnish it, and go ahead. I have negatives of this kind of treatment, by the hundred. Never saw green fog, red fog, or any other kind of fog on my plates yet, nor upon a lantern slide; never had a film frill except once or twice, when by mistake I turned on hot water; never had a negative go back on me with hypo stains either in green or yellow, but a handsome bluishblack, and people have frequently said they looked very considerably like a properly handled collodion negative. And there is

another thing which I do not do. These plates, which I am a little proud of, are not developed more than three a minute, nor in the back yard in the shade of the house, and they are not printed from till they are thoroughly dry; and if you want a boss gelatine negative keep the alcohol, methylic spirit, and all these spirits of moonshine away from it. You have seen some of my prints yourself, and of all sorts of matters. They are made with care, just a little brains mixed in the developer, a little more put into the focussing and toning, and out of it we get a passable print. I have given up getting brilliant effects, such as your friend refers to. But I am spinning this out too long, especially for a greenhorn. If my friend wants to make fine prints, tell him, after the prints come from the hypo-bath to use this same amount of Eau-de-Javelle in tepid water, just barely turned from cold; may turn his prints over and over, just as he would in the acid water, but as in toning, don't let them stick together, and if he has an extra lot of portraits that he wants to be sure of, make up two of these Eau-de-Javelle waters, running them carefully through each for about five or six minutes, then put them in his washingtank, and an hour or two is as good as all night. He will have fine, clear, bluishblack negatives on Carbutt's plates, providing the brains in the developer are all right, and he will have prints that will be (by the most delicate tests that I have been able to use) free of hypo. But I have written about more than I intended, and perhaps more than he will want to read. He can find out whether it is of any value or not, as Josh Billings's duck found out how long she could stand on one leg, namely by trying it.

PERSONAL.*

WEIMAR, February 29, 1884.

HERR HUENERJAEGER, a worthy gentleman, more than eighty years old, a pupil of Daguerre, and in all probability the oldest photographer living, is now in indigent circumstances. Restlessly following his profession in various parts of the world, and

or the Deutsche Photographen Zeitung.

having experienced many changes of fortune, he a few years ago resolved to return to his fatherland. Being shipwrecked on the voyage homeward, he lost his all, and reached his destination a poor man. The old gentleman has since tried to make a living by working in one of the ateliers of his native town, Brunswick. His advanced age and enfeebled health make that impossible now. The City Councils of Brunswick and a few colleagues have assisted him to a limited extent, and the Society for the Cultivation of Photography has aided him with a present of one hundred marks, but not enough has been contributed for him to live upon. He deserves and is worthy of our sympathy. Herr A. Sternitzky, of Brunswick, and the publishers of this journal, will receive contributions, for which proper acknowledgment will be Mr. W. Irving Adams, agent of Scovill Manufacturing Co., New York, has kindly volunteered to receive donations, and transmit them to the Deutsche Photographen Zeitung.

PERTAINING TO THE



Since our last issue it looked for a little time as though our splendid exhibition building was going to be moved to some other place, but if Cincinnati remains quiet we shall still have our exhibition and convention. Below we give the report of the proceedings of the Executive Committee, which shows real business enterprise. We are sure that a grand success will be made of the Convention. Mr. Weingartner's suggestion last month that photographers photograph Cincinnati largely, was a timely one, for if many more floods and many more such affairs as they had there a few

weeks ago occur, there would be nothing but photographs left of it, and the more they are scattered over the country the better it will be for the friends of Cincinnati who remain. We presume Mr. Landy took care that abundant photographs of the riot were taken, and we are expecting to hear from him.

TO THE PHOTOGRAPHERS OF AMERICA.

There has been so little said in the journals, and so little disturbance made during the past months of 1884, that possibly there may be some of you who need to be reminded that the time is fast approaching for the greatest and best convention and exhibit of photography ever held in this country.

There is not the least doubt but the Cincinnati meeting will, in many ways, be more profitable and interesting than any this or any other society has ever held; and it is really difficult to see how any of you who have progress written upon your escutcheon, can afford to stay away from this meeting. What with the wonderfully rapid progress made in the art, during the past year or two, and the added stimulant given by the liberal offers of prizes by our leading dry-plate manufacturers, there will be shown some remarkable achievements in photography. Of course, every photographer should go and be benefited by the opportunity; also, of course, every one should take along some samples of his work, the best he can make; and by the way, you don't know what a fine display you can make until you get about it. Try it anyway, and if you don't succeed to your entire satisfaction, be sure that is a hopeful sign, as it will leave some chance for improvement, after you have studied carefully the successes and failures of others. By all means, Hurrah for Cincinnati and a good time. There is a possibility that the photographers may be more successful in taking the city than were the rioters, during their late attempt in that direction. Oh! by the way, I came near forgetting to remind you all, that the treasury possesses still further capacity, and that Treasurer Armstrong stands smiling and ready to acknowledge the receipt of dues and subscriptions from any

who may have deferred the pleasure of settling up until this time.

Music Hall, where the Convention is to be held, is a magnificent building, and will afford splendid facilities for the exhibition and the business meetings. Also, Secretary Weingartner will see that nothing is left undone to make it pleasant for all who attend.

J. H. KENT, President P. A. of A.

MEETING OF THE EXECUTIVE COMMITTEE.

At a meeting of the Executive Committee of the Photographers' Association of America, held in Cincinnati, April 8th, the following gentlemen were present: J. H. Kent, President; Leo Weingartner, Secretary; W. A. Armstrong, Treasurer; E. Klauber and J. F. Ryder, Executive Committee.

Mr. Kent called the meeting to order.

On motion of Mr. Ryder, Mr. Klauber was called to the chair, and Mr. Armstrong, acted as Secretary.

The Secretary was empowered to employ a stenographer to report the proceedings of the Convention, and furnish a copy of the same to all the journals that apply for it.

On motion of Mr. Ryder, in view of the increased expense attending the coming Convention, the Treasurer was instructed to urge on all dealers, manufacturers, and importers the necessity for notifying the Secretary without delay, of the amount they are willing to subscribe.

After considerable talk, the Committee prevailed upon Mr. Kent to give a practical demonstration of the handling of a sitter under a light, and as Mr. Kent stands at the very pinnacle of his profession, these experiments will attract widespread attention. The platform upon which the demonstration will be made will be thirty by fifty feet, and the Committee will have everything in shape so that those desiring to make sittings can do so. There will be several other prominent men of the profession who will demonstrate under the light, but at present the Committee cannot tell who they are.

As the matter of business at the present is of the greatest importance, the Executive Committee prevailed upon Mr. Ryder to address the Convention upon the business management of photography.

Those wishing to make demonstrations will please address at once, Leo Weingartner, Secretary of the Photographers' Association of America, Cincinnati, Ohio.

Yours fraternally,
LEO WEINGARTNER,
Secretary P. A. of A.

The Executive Committee meeting held on April 8th, at Cincinnati, to arrange for the coming Convention was very satisfactory.

Music Hall, where the Convention and Exhibition will be held, is a grand edifice, giving ample room for all our wants. The floor of the great auditorium, which seats five thousand persons, will be occupied by manufacturers, importers, and dealers, in displaying their goods. The session-room is all that could be desired.

The photographic exhibits will be made in the large and well-lighted corridors, and can be arranged to suit the tastes or whims of the exhibitors.

Arrangments were made for the construction of an ample skylight, and a platform thirty by fifty feet upon which to demonstrate lighting and posing of the figure. President Kent and other prominent photographers will each day handle the camera and sitters, giving all an opportunity to see. All of the leading dry-plate manufacturers will have their own developing-houses, and the Association will also have one for the accommodation of its members. These preparations tend to practical work on a better scale than heretofore given.

Our Secretary, Mr. Weingartner, is hard at work getting everything in trim for the meeting. The Association is very fortunate in having the assistance of Mr. D. K. Cady, the "old reliable" stockdealer of Cincinnati, to help push the business of preparation. The liberal prizes offered by plate manufacturers for best collections of photographs upon their respective plates, will doubtless bring out a grander exhibit than ever before seen in this country, and the Cincinnati Convention is expected to outrank all former efforts.

Yours truly, J. F. RYDER.

Raise your prices now. You might as well for its got to come!

OUR PICTURE.

THE beautiful child-group which graces our magazine this month is from the studio of Mr. Leon Van Loo, Cincinnati, Ohio. It needs no commendation from us. work of the practical, careful artist is upon the face and in every line and contour of the group. It is rarely that we see a trio of children arranged so naturally, and who seem to sympathize so entirely with the efforts of the photographer. The story is told by expression, by attitude, by lighting and composition most satisfactorily. Some of those from whom we look for better things may declare that "photography is not an art," and the United States Courts may declare that "the law copyrighting photographs is unconstitutional because the production of photographic pictures is a mere branch of mechanics requiring neither brains nor artistic talent to secure them;" and yet, when we look upon such pictures as this, we certainly see the impress of the real artist upon them. Once upon a time a certain Grecian artist from a distant city called upon a brother artist in Athens. The stranger was disappointed in not finding his compeer at home, and so left upon his table a hastily drawn sketch upon a panel that lay close by. When the Athenian artist returned to his home, finding the sketch upon his tablet, he drew another by its side, even more delicate in contour and light and shade than that of his stranger friend, and again left his home on a sketching tour. When the stranger friend returned for a second call, a third sketch was drawn by him which combined all the elements of the other two and exceeded them. Again returning, the proprietor of the studio seeing this third sketch said, " No one in the world but Apelles could have drawn that. Lo, I have found my master." Thus the artist of old understood the principle of finding the individuality of a brother in his work, though his name was not appended. So we can see, in this splendid group, the individuality of the man who produced it-Leon Van Loo.

We have witnessed his novel method of handling children under his skylight. He has the faculty, by his treatment of them, of making them feel that they are in a parlor, engaged absolutely in the recreations and diversions of home, rather than in the studio where the painful operation of having the head taken off must be undergone. The little ones are first shown the various attractive objects of the studio, their interest secured on all that is about them, and their minds diverted from the business in hand. Then, almost without their knowing it, an exposure is made while they seem to be actually engaged in the line of their amusements. Mr. Van Loo has the faculty, too,

all his own, of securing their coöperation. The results are such as you see before you. After the play is over, then his arms are offered to the little ones, and they are escorted to the dressing-room as though they had partaken of a feast. Indeed, it is quite a feast to see the tact with which Mr. Van Loo secures his results. We commend the group as a study to our readers. The prints were made at our own rooms upon the Dresden paper, supplied for the purpose by Mr. G. Gennert, the well-known importer of New York.

Editor's Table.

ITEMS OF NEWS .- The Society of Amateur Photographers of New York is the name of the new organization successfully accomplished April 8th. The officers are as follows: President, Mr. F. C. BEACH; Vice-President, Mr. W. H. GILDER; Treasurer, Mr. JOSEPH S. RICH; Secretary, Mr. C. W. CANFIELD. By reference to the minutes, it will be seen that this new body is organizing in the right spirit, and means to do good work. Success to it. Mr. F. M. PICK-ERELL, for a long time connected with the establishment of Mr. James H. Smith, Quincy, Ill., has established himself in a gallery at Homer, Ill., where he will devote his energies to the arrangement of that business. May he have much success.

OBITUARY.—Mr. CLARENCE S. PECK, one of our valued subscribers, died at his residence, Zumbrota, Minn., March 31st. Mr. Peck was not only a good photographer, but a highly respected and valued member of society. Mother, wife, brother, and son are left to mourn his loss, with hosts of sympathetic friends.

AN IMMENSE CATALOGUE.—Mr. ROBERT DEMP-STER, successor to Mr. James H. Smith, 20 and 22 North Fifth Street, Quincy, Ill., has issued the mammoth catalogue of the lot. It is two hundred and twelve pages in size, royal octavo, elaborately illustrated, and includes lists of about everything that a modern photographer would desire to have. Few people, in reading such a catalogue as this, appreciate the labor, thought, and time required for its publication. The one before us would do great credit to any one. We wish Mr. DEMPSTER a real good business as the result of his enterprise.

SIX HUNDRED DOLLARS.—A magnificent prize offer from Mr. G. Cramer surprised our readers in the last issue of our magazine, and will again attract attention this month. Certainly such an offer as this should not be neglected, or be awarded either without sufficient effort being made on the part of many to secure it. Let the rivalry be generous, and let it be extensive also. The greater the competition in such cases, the greater the honor to the one who triumphs. Please read the offer over carefully.

ANOTHER FINE OFFER.—Messrs. INGLIS & RIED also made a magnificent offer last month of five hundred dollars in prizes, which photographers will also compete for if they are wise. As a matter of justice, these gentlemen should be encouraged in their course, for the money expended is considerable, and the offer is prompted a great deal by the desire to increase artistic effort among the fraternity. Let them be recompensed by a liberal competition and a worthy one. Be particular in understanding what they say.

Mr. W. L. Bates, of Denver, Col., has sent us a remarkable picture of a distinguished wheelman balanced on his bicycle so dexterously that not a single spoke is out of focus. This picture is well named "No Visible Means of Support."

ANNUAL LANTERN EXHIBITION OF THE PHOTO-GRAPHIC SOCIETY OF PHILADELPHIA.—The annual Lantern Exhibition of the Photographic Society of Philadelphia was held at Association Hall, Philadelphia, on the 16th instant. Henry T. COATES, Esq., announced the pictures. beautiful work was exhibited from negatives by a few of the members, giving evidence of no ordinary talent on their part. A good deal of indignation was expressed at the conduct of the members of the Committee on Selection of Slides. Some excellent ones made by members of the Society were rejected for reasons known only to the Committee. The exhibition was then supplemented by the introduction of some foreign slides by professional manufacturers, some of which were exceedingly badly chosen. Moreover, some splendid examples of portraiture were ruled out by the Committee, made by one or more of the liberal members of the Society. In their stead there were introduced no less than six photographs of windmills, made by Mr. SAMUEL T. Fox, the Chairman, we believe, of . the Committee. There were seven windmills, if we include the tolerable instantaneous view of a yacht under sail. Only two or three of these windmills had been shown before the audience began to feel that there was a joke somewhere, and thus Mr. Fox won the loudest applause of any gentleman whose name was mentioned as one of the artists of this occasion. Whether Mr. Fox, during his rambles last summer, imagined that he was the Don Quixote of photography, and therefore was called upon to fight a second "battle of the windmills," and thus force his victory upon the public, we know not. But all jokes aside. We think that the Committee rendered themselves liable to the severest censure on account of their want of judgment both in the selection of the slides, and in the pushing forward so prominently of their own work. We ought to say, however, that this action was not the work of the Committee of the Whole. Considerable dissent was expressed to us by one of the Committee. It is believed that the Photographic Society will be asked for an explanation from its Committee.

Dr. Vogel's new address is as follows: Prof. Dr. H. W. Vogel, W. Kurfürstenst., 124a, Berlin, Prussia.

A New and Entensive Dry-Plate Manufactory Predicted.—It is not often that we have to go abroad for photographic news, but we are informed by the *British Journal of Photography* that an extensive dry-plate manufactory

is to be started in America by English capital, and will soon be under way. W. Irving Adams, Eso., the well-known agent of the Scotill Manufacturing Company is to be offered the presidency of the company. Surely if such a thing is to be, no more worthy president could be chosen from our photographic fraternity than Mr. Adams, whose capability as a manager and business qualities are well known. Success to the new enterprise. There is plenty of room.

TESTIMONIAL.—Mr. H. E. MATTHEWS, of San Francisco, Cal., says, "I am happy in the possession of *Photographics* and *Mosaics*. Both are very highly prized and studiously investigated. *Mosaics* is my *multum in parvo*, and is all going to pieces with use. The item on page fifty-eight has alone been worth the cost of the book to me. I shall go for it every year."

MR. HENRY ROCHER, Weber Music Hall, Chicago, Ill., informs us of his continued desire to dispose of his magnificent business in that city. An ordinary business would have met with a prompt sale, but Mr. Rocher has no superior in this country, if in any other. As we have said before, there is a magnificent business for somebody to be had from Mr. Rocher.

PADDLE AND PORTAGE is the title of a new book by Thomas Sedwick Steele, Esq., of Hartford, Conn., author of Canoe and Camera, a book so well known to many of our healthloving readers. A number of photographs personally made by the author accompany the work, and altogether it is a splendid success. Price, \$1.50. For sale by the author, or Messrs. Estes & Lauriat, publishers, Boston, Mass.

THE New England Photographic Association is organized for the ensuing year under the following named officers: President, Mr. A. A. GLINES, of Newton; Secretary, Mr. H. W. WHITNEY, 563 Main St., Cambridgeport, Mass.

THE INSURANCE AND BENEFICIAL SOCIETY CRAZE.—For several years past a good deal of discussion has taken place in our national and other organizations on the subject of beneficial and insurance companies for photographers. As a rule, we have had very little to say on this subject, because we saw no immediate danger of any such unwise work being undertaken. Even now it is only necessary for us to issue a word of caution to those who do not think very deeply, that they part not too readily with their money in any such direction. If the photog-

rapher will think a moment, he will see that the insurance and benevolent organizations of our country are in charge of men of large experience and careful judgment in every direction. This is necessary, because the accumulation of funds that occurs in any such organization, must be carefully invested and taken care of, which is no easy matter in this time of money plenty. If photographers are prepared to select officers whom they are willing to entrust with their savings, and consider it better to do so than to invest in some well-established and well-known organization, now is the time to go ahead. We cannot see what advantage there can possibly be in anything of this kind for our craft. We await results.

THE Photographic Stockdealers and Manufacturers' Association of America is doing a benign and useful work quietly but surely. The dealers are gaining confidence in each other, and are beginning to work more and more together. As a member of this Association we see nothing in it that can interfere with the photographer or do him injury. In fact, it is quite the reverse. The time will come when the dead-beat photographer will be put out of existence, as one of the results of this Association. The gentlemen at the head of it are men of the strictest integrity, and have the constant good of the craft in view in their management.

MAGNIFICENT MICROPHOTOGRAPHS .- During a recent visit to Boston we had the pleasure of inspecting some of the most delicate microphotographs it has been our pleasure to see. They were the result of the skill of Mr. THOMAS PRAY, JR., Editor of the Manufacturers' Gazette, Cotton Spinner, and Steam User, No. 31 Milk Street, Boston, Mass. The subjects were all of cotton fibres, enlarged to many thousand diameters most exquisitely. Those who have not undertaken this most delicate of all photographic work know little of the difficulties and how to appreciate them. Mr. PRAY has had such success as will win him a name all over the world. He is one of our most industrious amateur photographers, and one of the most intelligent and successful, too, as he proves by the excellent article from his pen on another page. He evidently does not intend to sit down upon photography, or to set down in it, without doing some good for the craft.

HEARN'S PRACTICAL PRINTER.—We have to announce that this capital book on printing is now out of print, and that no more copies are to

be had. All the wrinkles and dodges of modern printing are embodied in Wilson's Photographics to such an extent that we hardly think it prudent to reprint the Practical Printer. Our readers will please make note of this in order that orders may not continue to come for it.

The Copyright Law.—Several correspondents have inquired of us as to the copyright law for books, photographs, etc. We shall have an elaborate communication on the subject of photographic copyright in our next issue by one of our best literary newspaper men. With reference to the copyright of books by a foreigner, no foreign citizen can copyright a book in this country. If he wishes his work protected, it must be done in the name of an American citizen. This has been done several times in the matter of photographic books, and their authors paid, but, as a rule, books are stolen by American publishers without any consideration being paid to the author.

MR. CHARLES LATHAM, Bradford, Pa., has favored us with some examples of his dry-plate work, which far exceed anything that we have seen from him heretofore, although he has been working the dry process but a little time.

STAMP PORTRAITS .- Mr. C. H. TONNDORFF, of St. Louis, Mo., finding the advantage of advertising in the Philadelphia Photographer, repeats his picture on the outside cover this month. This little picture is bound to attract a good deal of attention. We were in error last month in stating that Mr. J. F. RYDER, of Cleveland, had undertaken the exclusive agency for these pictures. Mr. RYDER is only the agent for Cleveland. As will be seen by his advertisement, Mr. Tonndorff has arranged with other parties for agencies in different pares of the country. We are asked to call attention to the advertisement jointly of Messrs. TENSFELD & KUHN. in which it will be seen that they have combined on a list of prices.

MR. W. F. VAN Loo, of Toledo, Ohio, has also favored us with some beautiful examples of his work. Mr. VAN Loo's enterprise is evidenced by his communication this month on the subject of prices.

Removal.—Mr. J. L. Clark, whose advertisement is familiar to our readers, has removed to larger and better quarters at 823 Filbert Street, Philadelphia. As a refiner of wastes, Mr. Clark is well and favorably known to many of our readers, and is worthy of trial by all.

FIAT JUSTITIA, RUAT C.ELUM! Which may mean, speak the truth or your roof might fall in! Concerning that "immense camera" mentioned in the February number of the Philadelphia Photographer, it is a fair-sized camera; but for years I used a field camera with which I made negatives 26 x 42, and had three different lenses for the same. The first negative we made with it was "Cobb Dock" near the Navy Yard (in 1874); then the "Big Guns" of Fort Hamilton, the U.S. Watch Co.'s building, etc. Your journal I think mentioned the fact at the time, and the camera is still in existence, although badly damaged by the fire of '76 in my establishment. If you try your mathematics on the subject, you will find my negatives are one hundred and ninety-two square inches larger than the little pocket-camera of our New England Very truly yours, friend.

GEO. G. ROCKWOOD.

STEREOSCOPIC GROUPS,-Mr. B. W. KILBURN, Littleton, N. H., has favored us with some thirtysix admirable stereoscopic groups of children, in all the sweet and pretty attitudes which the photographer with his child-loving and poetic mind could suggest. Moreover, we guess that here and there a fair hand and head have been enlisted in the work of posing and arranging. Among the attractive titles given to these admirable groups are the following: "Don't Stick a Pin in the Baby, Sue," "Bean Porridge, Hot," "A Stitch in Time Saves Nine," "Flower of the Family," "Jack Spratt and Wife," "The Sick Doll," "The Prettiest Girl I Ever Saw," and "Sucking Cider Through a Straw." Mr. KIL-BURN is now, undoubtedly, at the head of the stereoscopic business of the United States, and has won this position by his industry and artistic talent.

A New Stock-house in Chicago.—Messrs. J. H. Smith, formerly of Quincy, Ills.; and T. H. Pattison, formerly with Hiram J. Thompson, have opened a new stock-house at 83 and 85 Wabash Avenue, Chicago. They hope to have their catalogue ready shortly.

Mr. S. A. Stoddard, Glen's Falls, New York, has sent us a photographic catalogue of the views made by himself, about one thousand in number. Few who have not tried this experiment know the immense amount of labor required to get up such a catalogue. Mr. Stoddard offers to send it to intending purchasers for five dollars, the money to be refunded in case the

catalogue is returned. Send to him for circulars His landscapes are among the most picturesque in the world, Mr. Stoddard being an artist of true æsthetic feeling and education.

THE Compact Camera and Ruby Plate-holder invented by Mr. G. F. E. PEARSALL, is winning some grand testimonials from the press and people. Mr. PEARSALL has just issued a new price list and descriptive circular, which all interested in this subject ought to send for. His address is 298 Fulton Street, New York City.

THE NEW AMATEUR SOCIETY IN NEW YORK.—
A splendid beginning has been made by the new organization in New York City, and we congratulate the officers on their success. We devote considerable space to its proceedings. It is rarely that a new Society starts out so well. It was pleasant, too, to see some of our veteran amateurs present at, and taking part in, this meeting. All photographic societies should endeavor to do some good for the advancement of the art, even though it be only a hobby with its members.

OUR friend, ABRAM BOGARDUS, Esq., well known to everybody, amused and entertained the Photographic Society of the American Institute, a few nights by his delivery of an address entitled "Thirty-seven Years Behind the Camera." Nothing has occurred at this Society for a long time which brightened and snapped it up so, as did this address of Mr. Bogárdus. It has been printed in full in two or three of the other journals, so that all of our subscribers must have seen it; and crowded space prevents us from indulging in following suit. The whole of the paper reminds us of the old good N. P. A. days, when such brilliant addresses were for years sent out from the Presidential chair.

The works of the American Optical Co. were burned Thursday, April 24th. Everything is going on nicely again at the new factory.

Information Wanted.—A correspondent asks the following questions: "Are dry plates affected by heat and cold the same as wet? If your dark-room is very cold, and your dry-plate developer and water almost to the point of freezing, could a good negative be made with good light and reliable plates? The instruction is to keep your developer cool and have cool water; can they not be too cold?" Will some one please answer.

Specialties.

MAKE OUT YOUR OWN BILL, and remit cash with your advertisements, or they will not be inserted.

ADVERTISING RATES FOR SPECIALTIES.—Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. & We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement. Postage-stamps taken.

NOTICE OF REMOVAL.

On and after May 1, 1884, our address will be

216 East 9th St., New York.

At the same date the Chicago Office will be discontinued.

LAFAYETTE W. SEAVEY.

W. F. ASHE, ARTISTIC BACKGROUNDS

ACCESSORIES,

REMOVED TO 68 WEST FOURTH ST.,

4 BLOCKS WEST OF BROADWAY, N. Y.

My new studio is fitted up with all the modern improvements, and the most refined demands from a critical public can be satisfied. A visit to my establishment, which has the largest showroom, containing the greatest amount of stock of any place in the world, will be gratefully appreciated.

I have again added numerous new designs to my great variety of patterns for backgrounds and accessories, and keep also in stock a large quantity of goods for parties to select from, saving time and delay on orders.

FOR SALE IN THE BEST MINING CAMP IN AMERICA.—I have just received into my hands a good photographic outfit and full stock, which must be sold immediately. For particulars,

Address J. H. EARDLEY,
Grocer, Butte City,

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TIME.—It is our intention that every order received in the morning's mail (when not to be put on stretchers) shall leave this establishment the same day or the following morning. If too late for the morning work, it is sent on the second day. Having our own engine and electric light, we are not at all dependent on the weather.

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THE PHOTOGRAPHIC MOSAICS for 1884 is nearly all gone. Like its predecessors, it contains articles of interest to all persons connected with the art of photography. The introductory article by Edward L. Wilson is teeming with useful information, and should be read to be appreciated. As there is but a limited number of copies printed, those who wish to have a useful as well as ornamental work for their studios, should avail themselves by sending in their orders as quickly as possible. Nearly all gone.

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The old form of No. 18, Waymouth's Vignette Papers, oval, has been discarded, and a new pear-shaped style is now ready in its place. It is a beautiful piece of gradation and prints perfectly. Price \$1.25 per dozen. For sale by all dealers. See advertisement for all sizes.

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Solar prints and photographic enlargements furnished and finished in crayon, Indian ink, or water-colors. Photographic coloring on plain or albumenized paper and porcelain. Copies finished in Indian ink and water colors.

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Holds up to view all about manipulation, photographic art, posing, lighting, etc. Nearly 1000 sold. See advertisements and testimonials.

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WANTED, —A first class young man to run a gallery on shares. Also fast workman to make tintypes in park for pienic parties.

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Notice of Removal.—Mrs. Clarke, Artist, late of 561 Druid Hill Avenue, Baltimore, begs to inform her friends and the photographic profession that she has removed to 2104 North 20th St., Philadelphia, Pa., where she will be happy to receive any commission for water-color painting. Terms, etc., on application to Mrs. Clarke, or to the office of the *Philadelphia Photographer*.

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Photographics suits me better than any similar work I have come across. The giving of the experience of different workers on the same subject, and giving it in their own words, being an especially valuable feature.—S. B. HILL, Flemington, N. J.

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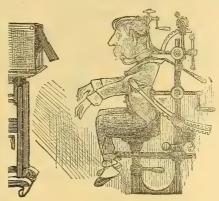
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THE genial well-known photographer, Mr. C. H. A. Tonndorff, has presented the public with a novelty in the photographic line. He calls his new invention Stamp Portraits. They are issued in sheets, gummed on the back and perforated like postage-stamps. Each sheet contains one hundred of these little gems. Their elegance and neatness, combined with their cheapness, will insure their popularity and create a demand for them. It will not be long before business cards and invitations will be adorned with these stamp pictures. John A. Sholten has, indeed, made use of them in decorating the programmes used at the Olympic Theatre and the Opera House, with excellent portraits of Mr. Irving, Miss Terry, and Maggie Mitchell. These pictures received the highest praise from all who received them. -St. Louis Globe Democrat.

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It is a most useful book, and its practical teachings to the studious photographer contain the most valuable information.—C. D. Mosher, Chicago.



Don't do that any longer. Get Schindler's Picturesque and Easy-Posing Chair. Send for prints and lists to the factory, West Hoboken, N. J. Our photographic studio furniture is a leading specialty, unequalled in usefulness, quality, and cheapness. For sale by all dealers.

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Send for price-list of second-hand instruments, fixtures, etc., goods that were reserved in the sale of my gallery. All in good order and cheap.

Address C. M. French.

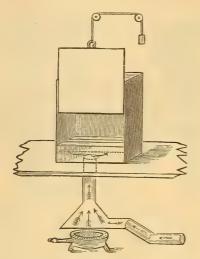
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One 11 x 14 single-swing, cone-bellows view-box (Semmendinger), silver-wire corner-holders, nearly new\$27 00 One double dry-plate holder, A. O. Co., with kits, which fits the above box 11 00 One A. O. Co 5 x 8 "76" stereo-box, threeinch focus Morrison wide-angle lens, one pair of single stereo-view lenses, Taylor folding tripod, all in excellent order, for lot only...... 30 00 One A. O. Co. 11 x 14 double-swing portrait-box, finest finish, bonanza holder, new, used only for three or four trial plates, only..... 55 00 All the above goods warranted as represented. Terms C. O. D., or cash with order. Money refunded if goods are returned in good order in

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The above is a bona fide offer. The committee of award will consist of five disinterested gentlemen, appointed at the Convention. At the close of the Convention, the exhibits which are awarded the prizes, as also the negatives from which the prints were made, shall become the property of Inglis & Reid, the frames to be purchased by them at cost price.

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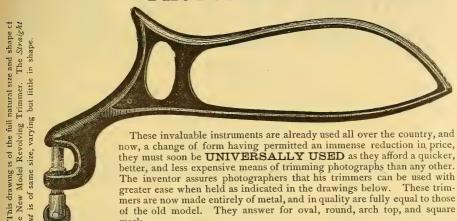
on or before July 1st, on which date the entries will close.

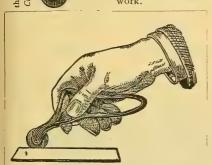
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720 (5 gross) of these trimmers were sold to one party in July.

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We have the following **Regular Sizes** always on hand at 10 cents per inch the longest way of the aperture.

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0 0 0				2.1 v 33 9	$2\frac{5}{16} \times 3\frac{3}{4}$ $2\frac{3}{4} \times 4\frac{1}{2}$	4×5 §			
$2 \times 2\frac{7}{8}$	$3\frac{3}{8} \times 4\frac{3}{8}$	5×7	$6\frac{1}{4} \times 8\frac{1}{4}$	216 2 04	16 4 4 4 12				
				$\begin{array}{ccc} 2\frac{1}{16} \times 3\frac{3}{4} & 2\\ 2\frac{1}{8} \times 3\frac{3}{4} & 2 \end{array}$	$\frac{5}{16} \times 3\frac{7}{8}$ $2\frac{7}{8} \times 4\frac{5}{8}$	$4\frac{1}{8} \times 5\frac{7}{8}$			
$2\frac{1}{8} \times 3\frac{1}{8}$	$3\frac{3}{8} \times 4\frac{5}{8}$	$5\frac{1}{4} \times 7\frac{1}{4}$	$6\frac{1}{2} \times 8\frac{1}{2}$		13 41 97 51				
$2\frac{1}{8} \times 3\frac{1}{4}$	$3\frac{1}{2} \times 4\frac{7}{8}$	$5\frac{1}{5} \times 7\frac{1}{5}$	7 x 9	$2\frac{1}{8} \times 3\frac{1}{8}$	$2\frac{3}{4} \times 4\frac{1}{4}$ $3\frac{7}{8} \times 5\frac{1}{4}$	$3_{8}^{7} \times 6$			
				2_5_v 215		$4 \times 6\frac{1}{8}$			
$2\frac{3}{8} \times 3\frac{3}{8}$	$3\frac{5}{8} \times 5\frac{1}{8}$	$5\frac{5}{8} \times 7\frac{5}{8}$	$7\frac{1}{4} \times 9\frac{1}{4}$	$2\frac{5}{16} \times 3\frac{15}{16}$					
				. FOI	R STEREOGRAPE	IS.			
$2\frac{5}{8} \times 3\frac{5}{8}$	$4 \times 5\frac{3}{8}$	$5\frac{3}{4} \times 7\frac{3}{4}$	$7\frac{1}{2} \times 9\frac{1}{2}$	Arch Tops.	Round Cornered.	Round.			
$2\frac{7}{8} \times 4\frac{1}{4}$	$4\frac{3}{8} \times 6\frac{3}{8}$	6×8^{-1}				3×3			
-8 A 14	18 A U8	0 & 0	$7\frac{3}{4} \times 9\frac{3}{4}$	$3\frac{1}{16} \times 3\frac{3}{4}, 3 \times 3$	$3\frac{1}{16} \times 3\frac{3}{4}, 3 \times 3$	0 & 0			

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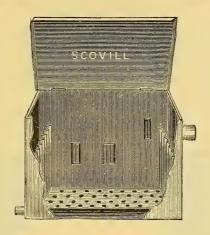
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4.6	41	X	54	. 4	1	00	sizes are put	"	14	x 17	44	12	00
11	41	X	61	i i	1	30	up in pack-	6.6	16	x 20	44	16	00
	5	X	7	. (-1	55	ages of not less than	6.6	17	x 20	66	17	00
11	5	X	8	i i	1	75			18	x 22	6.6	20	00
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V.		PRI	CE	LI	ST	9	و		
No. 1, for 3	x 4	Plates	, -					\$1	20
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" 3, " 4								1	30
" 4, " 4		44						1	35
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" 6, " 5	x 8	"						1	50
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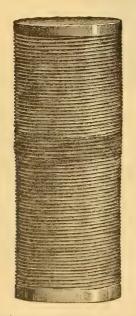
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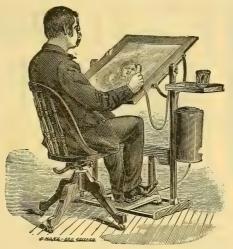
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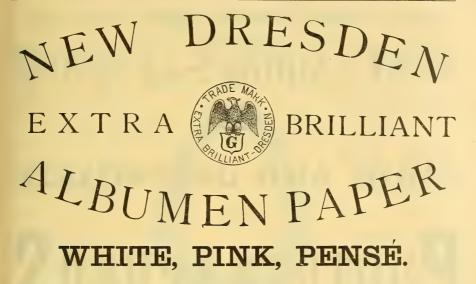
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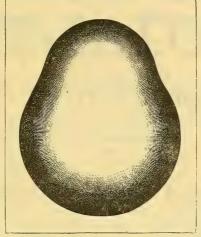
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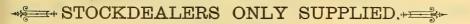
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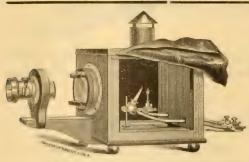
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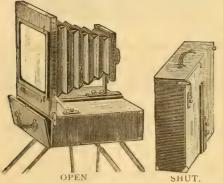
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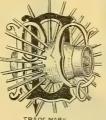
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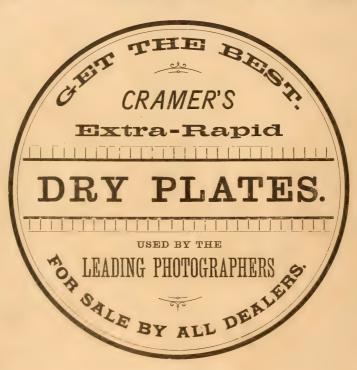
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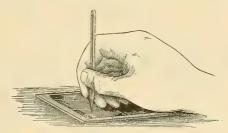
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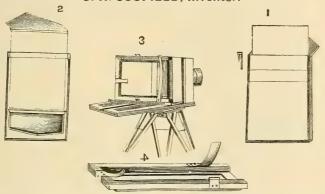
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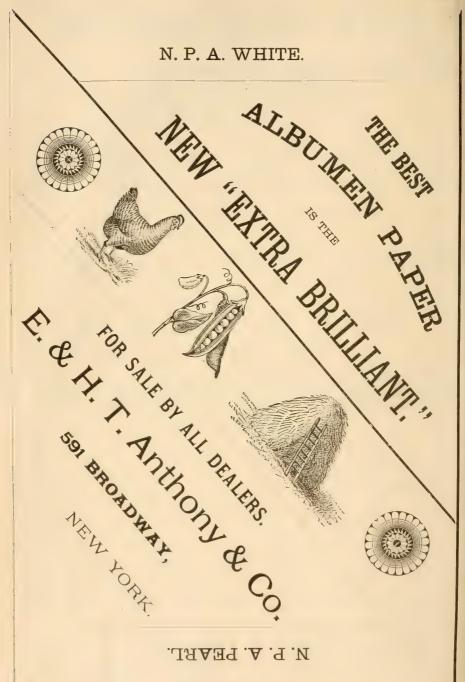
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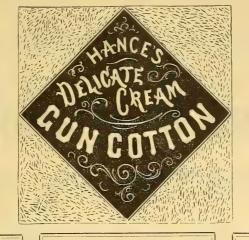
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GERMAN CORRESPONDENCE.

The Latest Discovery—Photographing Colored Subjects in the Right Proportion of their Intensity.

SINCE the despatch of my last letter many important events have taken place in the province of photography. My only regret is that I am compelled to be too personal in discussing these important things, and therefore judge perhaps too subjectively in the matter. I have previously told you how I succeeded in conquering the false effects of the different colors upon the photographic plate; how I prophesied that the yellows of nature would no longer be pictured as blacks, nor the blues as whites. fundamental defect of photography has been, therefore, triumphantly overcome; so completely that the interest in the subject has become general, and pecuniary considerations offered me for the application of the discovery to the reproduction of oil paintings. The process had then remained a secret in the hands of a few firms. But the Society for the Advance of Photography has forestalled all others, inasmuch as it has offered me considerations of honor, under the condition that I make public the new process in so far as it touches upon the method of rendering collodion sensitive to the influence of colors.

I herewith give you a description of this collodion process in detail, premising that I

am still busy in the elaboration of a new process for gelatine plates.

Common collodion exhibits its highest degree of sensitiveness in the dark-blue portion of the spectrum, which is incorrectly called the indigo band. It is only after long exposure that the sensitiveness for green, yellow, and red is manifest, and in the degree as named.

Now, by the application of a principle which I had the honor first to discover and prove, the tardiness of these colors may be overcome and their sensitiveness increased, by the employment of substances which absorb these rays. The majority of these substances operate best upon collodion dry plates; only comparatively upon wet collodions.

To this class belong those dye-stuffs known in commerce as the eosin. There are two varieties: (Gelbstich) yellow shade, scientifically called tetraiobromofluorescene, derivative of potassium, and (Blaustich) blue shade, tetraiodofluorescene, derivative of potassium. Besides others which I have investigated, methylated, chlorinated, and nitrogenated products. Leaving the consideration of these in detail for the present, I may merely remark that they are at present important pigments in dyeing, and are not to be had commercially in a state of purity, being frequently mixed with dextrine, etc. These foreign ingredients act detrimentally upon the silver bath. Of the

two eosins, Gelbstich and Blaustich, the latter gives more intensity than the former. Combined with alkalies, both exhibit a peculiar fluorescence. In dilute solutions they are readily soluble in water, less so in alcohol, and absorb powerfully the yellow, green, and blue-green rays. Added to collodion in the proper proportion in the employment of dry plates, they render them sensitive to the rays above mentioned.

Besides the eosins, there is another pigment substance which I owe to Dr. Martins—cyanosin—which characterizes itself as a powerful yellow sensitizer for wet plates. This cyanosin, in its power of absorption, so far exceeds eosin, that its absorptive band lies more to the red end of the spectrum, including, therefore, not only (as with eosin) a yellow-green sensitiveness, but also an orange sensitiveness. Unfortunately; this substance cannot be had commercially in sufficient degree of purity.

If experiments be made with these dyestuffs with gelatine and collodion plates, it will be observed that the former, for spectrum yellow, can be made double as sensitive as for spectrum blue. Practically, these would be of little advantage, since the yellow of dyes in comparison with the yellow of the spectrum is so dark that, as I have previously shown (Lehrbuch, 157), the yellow sensitiveness must be twenty-five times as great as the blue sensitiveness to make the dye-yellow really brighter than the blue. Much more favorable results have been obtained with collodion dry plates. Even with my earliest experiments I succeeded in making plates which were eight to ten times as sensitive for yellow as for blue. I am therefore justified in presuming that in the pursuit of this interesting problem (the taking of colored bodies in the proper relation of their tone-color) I should apply myself to the collodion process.*

The effect of these dye-stuffs, as I have previously said, depends essentially upon the constitution of the collodions. If to

ordinary iodized collodion there be added about five per cent. of a solution of one part by weight of eosin or cyanosin, but slight increase in yellow sensitiveness will be perceived. I made the same experiments with iodized collodion with various amounts of bromide, which tended to show that the yellow sensitiveness increased in proportion to the richness of the collodion in the bromine salt.

This experiment would therefore of itself tend to the recommendation of a bromodized collodion, but it has been shown that a small percentage of iodine acts favorably upon the yellow sensitiveness. If the silver bath by long use has become surcharged with iodine, there is precipitated upon the plate a sufficient iodide of silver, so that pure bromodized collodion may be employed, but with fresh collodion it is well to add five per cent. of pure iodized collodion. In general, the sensitiveness of a bromo-collodion plate containing iodide of silver and eosin, is for white light threefold less than ordinary portrait collodion.

RECIPES.

Pigment Solutions.—As there are none but such as may be had in commerce, we are compelled to recommend the ordinary eosin—Gelbstich and Blaustich.

½ gramme of eosin is dissolved by long agitation in 160 ccm. of water at 95°. The insoluble portions are suffered to settle, and the clear portion decanted.

2 grammes of bromide of cadmium are dissolved in 30 ccm. of alcohol and filtered. Then 1 part of this filtrate is mixed with 3 parts of raw collodion containing 2 per cent. of cotton.

For many purposes a thicker consistency is needed; such may be had by using a solution of $2\frac{1}{2}$ grammes of cadmium bromide in 30 ccm. of alcohol, in the same proportion as above, only using collodion containing $2\frac{1}{2}$ per cent. of cotton instead of 2 per cent. Such a collodion does not flow as readily, and is longer in silvering.

To 95 ccm. of the above collodion (a) are added 5 ccm. of eosin solution (b) and well shaken. This collodion should be kept in the dark in a yellow flask,*

My experiments with gelatine I shall describe later, merely remarking here that the isochromatic plates of the Parisian firm of Clayton a Tailfer are only twice as sensitive for yellow as for blue.

Increase in the amount of eosin has no effect in increasing the yellow sensitiveness, but only

Silver Bath.

Nitric acid is not to be recommended for acidifying, because it acts too powerfully upon the colors. Special caution is necessary in this respect, inasmuch as the excess of acid, by acting prejudicially upon the eosin, prevents any yellow sensitiveness in the plate.

With respect to the danger of the introduction of foreign bodies (from the impurity of the commercial dye-stuffs), I would recommend the employment of a separate bath for this purpose.

Developer; Intensifier; Fixer.—Those already employed with wet plates may be used as such. The plates are manipulated like ordinary wet plates, hence requiring no change in tactics. Pyro or mercury or uranium and lead intensifiers may likewise be employed.

Modus Operandi.-The plates are gelatinized - 1 gramme of gelatine in 300 grammes of warm water, filtered, and on cooling 6 ccm. of filtered cold-prepared chrome alum (1:50) added. The plates are cleaned in acid, washed, and laid in a dish of distilled water, and afterwards twice flowed over with the gelatine solution. The first serves the purpose of expelling the water from the plate. The excess is poured off and thrown away. The operation is best performed in a room not too cool. The flowing with collodion is done as usual. The silvering, however, requires more time; at least six minutes. If the bath is strong the time is lessened.

Before beginning the operation it is necessary to test the bath for acidification, and if it be not acid in its reaction on litmus, acetic acid must be added.

In reference to the lighting of the darkroom, there is no need of extraordinary anxiety. I recommend the orange lamp-

diminishes the entire sensitiveness of the plate. Diminution of the amount of eosin diminishes the yellow sensitiveness. The above proportions have been deduced from repeated experiments.

cylinder. Eosin itself makes the collodion only slightly sensitive to red light. If the plate is shaded, the yellow light ordinarily employed in the dark-room may be used, care being taken to keep it from the direct action of the light.

Exposure. — As before mentioned, the sensitiveness of eosin bromide plates is about one-third the usual sensitiveness of ordinary iodo-collodion plates. This is datum, therefore, for the time of exposure. With the taking of colored pictures, for example, the color scale of my Handbook, the increased yellow sensitiveness is not so striking as many might be led to expect. Chrome yellow and ultramarine blue are perhaps about equally bright. On the other hand, the madder dyes with eosin are quite manifest. These appear in their true tone colors.

The action of the eosin for other colors (greens) is very striking; but if it be desired to diminish still more the action of the blue, it is necessary to make use of a yellow glass. It is very important to have the right tone to the yellow glass. If it be too dark, the time of exposure is lengthened; if too light, it diminishes too little the blue. I determine the proper tone by the spectroscope. Or the tone may be obtained photographically by those who do not know how to operate with the spectroscope.

Now it is not here asserted that every picture must be taken by the yellow glass. There are, in fact, pictures which are taken best without the glass. Experience will direct the operator in any particular case whether to use the glass or not. It is however to be remarked that the yellow glass constantly lengthens the time of exposure (often threefold). Even the best yellow glass absorbs not only blue but also, partially, yellow light. I am accustomed to make use of the aplanatic, which gives, even with full opening, sufficient sharpness. With long exposures a box is recommended which will admit of placing in front of the prepared plate a second plate. To prevent the drying this front plate may be yellow:

The Second Silver Bath.—After exposure, the plates may be developed like any other wet plates, provided the bath has not been too much contaminated by foreign bodies in the coloring substances employed, giving rise to the so-called organic faults. These consist partially in fog, partially in an unequally cloudy precipitate, partially in striæ running from the edge to the middle of the plate. The latter are more frequent than the former. They may, however, be prevented by judicious movement of the plate in the bath. If, however, the bath is much affected by the organic substances, it may be necessary to use a second bath, which may be called a developing bath.

The plates, before the development, are dipped in the following bath:

The plates are moved about in the solution for about two minutes, the impure silver by this means being washed off. The development may afterwards be done without danger.

Development.—The plates may, on general principles, be developed with the usual iron developer of wet plates, but the alkaline developer may also be employed equally as well, and, moreover, has the advantage of showing less the effects of organic impurities than the acid developer.

A silver bath is used for alkaline development. The exposed plate is first washed with distilled water, then under the faucet for about five minutes, then again with distilled water; the development is done best in a dish with the following solution:

With too short time the carbonate of ammonia may be omitted (the ammonia must always be fresh).

DR. H. W. VOGEL.

BERLIN.

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OUR AMATEUR CLASS.

BY AN OLD AMATEUR.

(Continued from p. 138.)

In former papers we have endeavored to give the method of using to advantage the photographic apparatus in securing an impression upon the sensitive plate, and in the present article we shall try to give clear and simple directions for calling into existence the latent image.

There are many theories to account for the marvellous action of development, but we shall not at present trouble the reader with consideration of the philosophy of the subject, knowing from experience that after a day's exposure the photographer is too anxious to behold the fruit of his labor to bother his head about theories. Therefore, we shall, without delay, speak of the dark-room.

The amateur cannot be too careful in the fitting up of the room where he is to critically test his skill. He cannot afford to allow extraneous light to creep in from numerous crevices, whereby his plates may suffer fogging, and all his field labors be lost in a moment.

It is true any room will do for a darkroom, but it is best to select one having as many conveniences in supply of water and gas as possible. An ordinary bath-room, having the water-supply, will serve every purpose, provided it be made perfectly dark. On general principles it is best to use a lamp or gas-jet screened by the ruby or orange light, because ordinary daylight, not being constant in its intensity, but varying with the time of day and season of the year, and with cloudiness and sunshine, cannot furnish the beginner with data on which to work. He will have no uniformity in his method, and cannot judge how his development is progressing. After thorough exclusion of white light the next important consideration is thorough cleanliness in every particular. Do not use one dish for everything, or you will have woful results. Have the dishes marked so that the contents of the developingbottle may not be poured into the hypo dish. Provide yourself with several funnels, and with more than one graduate. Wash

everything thoroughly after using it. Keep the table upon which you work as dry as possible, so that the pan which stands upon it will not carry with it any solution when you wish to pour back the developer into the bottle. As regards the table, have it perfectly level, so that your scales will stand level also. Do not weigh the material directly upon the pan of the balance, but have two pieces of paper of the same weight, one for each pan, to counterbalance, and put the chemicals upon one of these papers. Also in measuring the liquids, be careful to see that the surface of the liquid reaches exactly the mark on the graduate; this is best effected by holding the graduate up about the level of your eye.

If possible, have the darkened portion of your window so arranged that you may readily admit daylight when not having any sensitive surface exposed. There is no need of weighing chemicals in semi-darkness. Be careful, however, that the frame be made to fit tightly, so that no light leak in from the crevices. Having lit the protected lamp (ruby or orange), open the plate-holder and take out the first plate, then close the holder until you need the second plate, place the plate in the developing-tray, sensitive side uppermost; having the developer in proper condition ready at hand, pour it over the plate in such a manner that the surface is submerged as quickly as possible, then rock the dish gently back and forth, so as to have a uniform effect upon the surface, and watch intently the progress of development.

Now, one word as to the use of developers. Do not be fickle in your choice. Choose either oxalate or pyro, and do not change your mind with every suggestion some friend may have the kindness to give you. You can only hope for progress by adhering to one process until you gain sufficient ideas from it to serve you in any particular case.

The proper development of a plate is a work of skill, and not a feat of legerdemain, and skill can only be attained by patient and careful study and close observation of detail. Emphatically, there is no royal road to development. It is good advice to follow literally the formula given with the

special brand of plates you are using—do not deviate an iota. The makers of the plates, be assured, have tried everything likely to give the best results. Do not blame any brand of plates until you have thoroughly and conscientiously tested them according to the plain law laid down by their maker, and by no other method. A general formula for developer fresh for ferrous oxalate, is as follows:

Having saturated solutions of oxalate of potassa and of sulphate of iron, take one part of the iron to five parts of oxalate, mix the two, and pour the mixture over the plate as above directed.

If you notice that the negative comes up too quickly, you may safely conclude that the plate has been overexposed, and the developing solution needs a restrainer to check its action. Lift the plate from the tray, add an equal bulk of water, replace the plate, and continue the development. This procedure will give what is denominated a soft negative—that is, one not presenting fine contrast in light and shade—not having vigor and brilliancy. If more vigor is wanted with an overtoned plate, recourse must be had to the bromide solution.

Make a solution of bromide of potassium in water in the proportion of ten grains to the ounce, and add about one drachm of this to about every four ounces of developer; do not measure it, but estimate it; however, do not be incautious in its use. Lift the plate up as before, and add the bromide and allow it to mix well with the developer, then replace the plate and continue development. With some brands of plates the bromide will act more vigorously than with others. The retarding action of the bromide will enable you to save an overtimed plate, but nothing will give as good a picture, one having vigor, crispness, and beauty, as the proper timing of the plate in the camera.

If, after a reasonable time, the plate does not show detail in the shadows, you may conclude that it has been undertimed. Lift it up from the bath, and add to the developer about ten drops of a solution of hyposulphite of soda (strength of three grains to the ounce) to about every four ounces of solution. Be careful in the use of the hypo, as an excess will cause the negative to be dull and flat. Hypo should be used as a last resource to save an undertimed plate, and I may caution you here to throw away this doctored developer immediately after using it, and to wash thoroughly the tray, so that no trace of hypo remains to contaminate the next plate you may place in it.

A properly timed plate may be told by the beauty of detail which will exhibit itself with the normal developer. After developing, have ready a dish containing a rather strong solution of alum in water; wash the plate from the developer and place it in the alum bath, the object of which is to harden the film and prevent frilling of the surface. Wash the alum well out before fixing in the hypo, and be sure the plate is thoroughly fixed, otherwise an ominous yellow streak will exhibit itself in a short time, and the negative will become worthless. After fixing, wash thoroughly to eliminate the hypo. Then dry and varnish, and the work in complete.

THE GREAT MASTERS.

BY WM. H. SHERMAN.

THE beginnings of art belong to the period of unknown duration, which preceded the earliest date of written history. Human events transpired and their story was handed down from sire to son through long ages in legends and tradition, many of which grew into myths as they were viewed through the mists of centuries. Men were transformed into heroes. Mighty men came to be reputed gods, and Olympus was at length peopled with imaginary deities. This transformation of the human into the divine, is part of the poetry which comes down from the earliest ages. And poetry is art as well as sculpture and painting. Eloquence, music, and architecture are other names for it in its varied manifestations.

One of the greatest masterpieces of ancient art, is the "Iliad of Homer." Considering that it was produced long before books were known, it is not too high praise to assign it the first place among the works of human genius. But great events had

taken place and heroic deeds had been performed which kindled the poet's fire. He painted the scenes and incidents of the Trojan war, in glowing and unfading colors and with matchless skill. The immortal epic abounds in inimitable descriptions of valiant deeds, their actors and equipages, chariots, steeds, ships, individuals and groups, the beleaguered city, the invading army, scenes of pathos, and of fury, combats and victory. But of special interest here, is the description of one of the most important works of art of the prehistoric period, namely, the "Shield of Achilles." According to the legend, Achilles was the son of the Goddess Thetis by a mortal father. In order that her son might be suitably equipped, she requested Hephæstos, the artist of the Gods (also called Vulcan), to furnish Achilles with armor of his own divine workmanship. The God grants her request, and after it is completed she carries the resplendent present to the warrior. Although perfect in every part, the shield had received the special attention of the artist.

"And first he forged the huge and massive shield, Divinely wrought in every part—its edge Clasped with a triple border, white and bright."

Then follows a full description of the scenes from every-day life and from nature, which were represented on the sides of the shield, and having borne it to her son,

"The Goddess spake, and laid the armor down Before Achilles; as they touched the earth, The well-wrought pieces clanked, and terror seized

The myrmidons. No one among them all Dared fix his gaze upon them: all shrunk back.

Achilles, only as he saw them, felt His spirit move within him. . . .

'A God indeed, my mother must have given These arms, the work of heavenly hands: no man

Could forge them.'"

Now we may infer that for this heavenly artificer of legend and poetry, there must have been a human prototype, and that whatever may have been his human name, he must have been an artist. The description of the poet was inspired by the creation

of the artist. The sublime conception of the former, based not on what he had seen, but on what he had heard, and which had been transformed from history into mythology, may have transcended the achievement of the latter, yet no doubt exists that it was a work of high order that had so worked upon the imaginations of those who saw it, as to create the notion of its superhuman origin.

In Egypt, art is believed to have flourished 4000 B.C. In Assyria, Chaldea, Persia, and India, its date also belongs to a remote antiquity. There were gorgeous temples and palaces with elaborate carvings and rich decorations. But for the most part, the art of those oriental nations appears to have been restricted to conventional styles, and under the restraint of hierarchical domination. The figures are stiff and often grotesque: human forms with birds' heads; winged bulls with human heads; human figures with arms and breast in front view, while the face and feet are in profile; Kings were represented much larger than common men. King Rameses II., for example, was represented with his horses and chariot, followed by his six sons in three chariots, all of whom, similarly conveyed, occupied only one-third the space of the King and his equipment. In Assyrian art, the hair was represented by stiff parallel lines, while the beard was made to appear like a rectangular block, closely covered with scrolls. Such art as this was destined to exist in after-ages, like the nations themselves which gave it birth, only in its fossil remains, and not in its influence on civilization.

It is to Greece we must turn for the type that was to survive in the struggle for existence, and become the example for all future time. The first epoch of Greek sculpture, known as the Archaic period, begins after the seventh century B.C., and extends to the beginning of the fifth century, or about 480 B.C. This period was marked by great activity in the development of plastic art, which reached the coast of Asia Minor and adjacent islands. A wonderful chest of cedar wood covered with carved mythological subjects, and inlaid work of gold and ivory, was sent from

Corinth to the Temple of Hera, in Olympia. A famous throne was executed in Lacedæmon, elaborately carved and supporting a bronze statue of Apollo. In the Peloponessus were celebrated masters, and an influential school was founded. Among their works were statues of gods and heroes often in groups, in which marble was for the first time used. A combination of gold and ivory was also employed, which was called "chryselephantine."

The most important works achieved during this period, which have been preserved, were the groups of statues from the Temple of Minerva, at Ægina, an island near the coast, afterwards subjugated by Greece. These statues were discovered during the present century, and are now in the Glyptothek at Munich. There are eleven figures from the western pediment, in nearly a perfect state of preservation, representing the contest between Greeks and Trojans, for the dead body of Achilles; Pallas Minerva steps between the combatants to protect with her shield the body of the fallen warrior. The figures are in various attitudes: standing, kneeling, lying, advancing, reaching forward, drawing the bow, and throwing the lance. All except the Goddess and Paris are entirely nude, and are executed with exact knowledge and great skill; "life and action are expressed with unsurpassable power in the strongly strained muscles and swelling veins. . . . At the same time, nothing is to be seen here but a strict and coarse observance of nature unsoftened by idealism." (Luebke.)

Thus we note the steps by which art advanced during the Archaic period. The last works mentioned were executed about 500 в.с. We find a masterly technical skill, exact anatomical knowledge, and close observation; but with all this, a notable lack of the higher qualities of artistic feeling and a sense of ideal beauty. We have the body without the soul; the form of passion without the emotion. Every figure wears the same set smile and expressionless features. Physically speaking, the materials and machinery of art are at hand. It needs but the touch of genius to awaken the marble into life. The confines of the Archaic period are reached, but not passed.

A CONVENIENT DEVELOPER HOLDER.

Amongst the many new things which are being daily added to the already long list of photographic conveniences, there are few which the professional photographer can, with so clear a conscience, recommend to the fraternity as possessing peculiar excellences of the highest degree as the little metallic case which forms the subject of our cut.

As a holder for the developer used in dryplate photography when travelling, it is simply perfect. Long before it had been furnished with the neat graduated glass, it

had suggested itself as a ready means of carrying the developing liquid when long photographic journeys were necessary, though not originally intended for this purpose by its inventor.

Personal experience is always convincing,

and accordingly we may add that a well-known amateur photographer, intending to make an extended tour in the Alps, and through France, Switzerland, and the Pyrenees, was induced to employ the metallic case for the particular purpose we have mentioned. His developer was accordingly put in the bottle, and the metallic case securely screwed down upon it.

It withstood all the hard usage of mountain travel, and the still rougher handling of railroad officials. His camera being made of more delicate material, succumbed, but on his return to America, the developing case presented as clear and undented a surface as on the day when first he put the developer in it.

In fact it seems almost impossible to dent the hard surface of the drawn metal; the corrugations add also to the strength and power of resisting crushing weights. Moreover, these cases are light in weight and highly ornamental in appearance, being doubly plated in nickel with gilt, and handsomely finished. They are also made adjustable to bottles of any size, so that there is here an additional protection from breakage. In a word, they are pronounced by the professional photographer as the only perfect and truly convenient developer carrier, and no one who has ever known their convenience would do without them.

We understand that the dealers all sell them.

FROM AN OLD PHOTOGRAPHER.

It is good to hear from these old photographers sometimes. Our friend, Ex-President Abraham Bogardus, entertained the members of the Photographic Society, in New York, a short time ago, with an account of what he called "thirty-seven years behind the camera." It is published in several other magazines, so we do not repeat. There are but few of these forty-year-old veterans left now, and we are always glad to hear from them. We add some extracts from a couple of letters recently received from another, whose name is familiar to many of our subscribers:

"Forty years ago, in the City of Bangor, Me., I learned to make daguerrotypes from

Mr. A. B. Vinning and wife, of Massachusetts, who, with an old French tube, made the first pictures that were gilded with gold. A man by the name of Roper had a short time previously made a few daguerrotypes, and sold them without gilding, for at first the art of gilding was unknown; you have likely seen such pictures. In those days we sat the subject from one to five minutes; I am now making sittings in one second's time, and some of them are over-exposed. What a change! Two or three years after I began, I remember, a man came to me to have his picture retaken. The day was dark and stormy, but I undertook to beat the other fellow, so I coated a plate and sat the man in as comfortable position as possible. I think I kept him looking at the lens seven minutes. After mercurizing the picture I asked him to look at it. It pleased him very much. 'Why,' said he, 'the other fellow didn't sit me half as long as you did.' I thought that was a good joke. As the day is a stormy one, I have been making some chloride of gold, and thinking what a thing dry plates are for our people. Our rooms are now free from the fumes of iodine, bromine, and ether. Head-rests are not needed much now, though from force of habit I still feel as though the rest must be used. I suppose the great majority of photographers are using dry plates. I am so confined to my business that I do not get out to see what the fellows are using. I have tried many of the brands put on the market, but have had the most success with the plates of Allen & Rowell, of Boston. I see by the journals that the national meeting will be held in Cincinnati, but unless they stop firing guns so recklessly out there I shall feel safer at home. I hope to attend a convention when they come east as far as Boston, though I know we are on the verge of creation up here in New England. feel as though I have yet much to learn of our beautiful art. It has been a most absorbing business all these years to me, and I never took more pleasure than at present in operating. I know very few of the leaders of our business. Mr. Ryder, of Cleveland, whose place I visited in 1857, kindly sent me, two years since, some samples of his work, and they were beautifully done.

"We have had the most dubious weather the past winter I ever saw, but with the advent of spring we shall soon forget the cloudy days.

"I was much impressed with a letter of yours, published in the *Photographic Times* recently. You plead for specialties among photographers. You hit me hard when you speak of want of success, because photographers undertake everything possible to do with a camera. Well, you are right so far as making fine work is concerned. Operators in large towns and cities, where there is a large population to draw from, I have no doubt, would make a reputation by so doing, but many men are to be found now who do most of their work with their own hands, and to make a living are obliged to do all sorts of work.

"Well, well, how it rains! Do you know it has rained in this locality since the first of February, most all the time? I never have spent but one day in your city, and then it rained so I could not go out. In 1868 I took the steamer Hendric Hudson, bound for Havana, Cuba. I had a friend with me; we were going to open in Cuba, but the fates were against us; we were wrecked right in sight of Havana, and lost our goods. I have spent five winters in Cuba, on the south side. It is the most charming climate I have ever been in, and the Spanish people are fine people to work for, and you will see many queer sights. If any of your readers wish to go to Cuba to work, tell them to start in the month of November, take plenty of material, and go into some one of the many cities, hire a house on a good street, get a license from the mayor, which costs twelve or fifteen dollars for six months, and then go at it. It costs very little to get to work, perhaps twenty-five dollars. A skylight can be made by taking off the tiles from the roof and covering the place with white cloth. I never found any trouble about business. You can stay there through the winter and return, if you choose, in the spring. It is a fine change for any one who likes variety. But I am spinning this out, so I'll stop right here. Wishing you success in your efforts to elevate the craft, I remain "Yours truly,

"John P. Burnham."

A NEW COLLODION PROCESS.

The dear old collodion method! How like a charm its mere mention acts in rousing the attention of its old votaries. And it is not to be denied that it has some peculiar advantages over the new gelatine method. First, in the ease with which every photographer may prepare his own plates independently of the manufacturer. Second, in the comfort by which he may work in his darkroom without fear of injury to the eyesight from ruby lights.

Moreover, there are to be taken into consideration the ease and rapidity by which the plate may be developed. The fixing, likewise, is accomplished more rapidly, and the washing effected in a much shorter time. Moreover, the price of the collodion method is less than the gelatine. The latter is a factor of no small consideration to the professional photographer. Now let us consider if there be any advantages in the results accomplished. We have had ample time to test the respective merits of the two methods.

Granting the superior sensitiveness attainable with dry plates over the wet collodion, I think it will be admitted that a collodion negative has a superiority in sharpness and brilliancy. The superior sensitiveness of gelatine plates is often at the cost of these qualities of the wet plate.

The fact is so generally acknowledged, that it has become the aim of dry-plate makers not merely to manufacture highly sensitive plates, but also such as will give strong and brilliant negatives. The addition of the iodide, which is reluctantly introduced, may conduce to this happy result.

The lovers of the collodion process have not been idle in trying to improve it.

It is, therefore, with pleasure that we make known a new process by Möller, in Wedel, which, so to say, is a compromise between the wet and dry process; a harmony between the two.

The process is about as follows: A plate collodionized as usual with iodized collodion, is dipped in the silver bath, then without flowing off the superficial nitrate solution from the back, the plate is flowed over with a solution of tannin, and the plate moved so as to effect a complete mixture of the nitrate

and the tannin solution uniformly over the entire plate. The tannin solution should be about one to one hundred.

After about one-half minute the plate is thoroughly washed with pure water to eliminate any soluble substance from the film, the plate is then placed for a short time in water. The plate after exposure is developed with an alkaline developer. The ferrous oxalate developer is very advantageously employed,

The image appears quickly, almost instantaneously, if the negative has been fully timed, and the details are soon attained.

The often scarcely perceived details of the transparent portions are strengthened with pyrogallate of silver intensifier.

The iodide of silver which has not been affected, is easily eliminated by the hyposulphite of soda.

For comparison with the earlier renowned dry process of Russel, we give of the latter a short description. Well-cleaned plates thoroughly dried are flowed over with a solution of gelatine, and are then suffered to dry either spontaneously or by the aid of heat.

The collodion is now flowed over the plate in the usual way, sensitized in the silver bath, and washed in water until all apparent greasy streaks disappear. The tannin solution is then poured over the still wet plate and dried as before. The plates may be used immediately or be kept for later use.

The plates are developed with pyrogallic acid solution, supplied with silver nitrate and citric acid.

Russel was the first who made use of the alkaline developer, by which their sensitiveness is heightened in the most extraordinary degree.

Möller's plates have a sensitiveness of about five times that of an ordinary wet plate. They may be kept for many days unchanged if kept in pure water.

Whether the Möller plates require a substratum of albumen or gelatine we are not told, but it is probable that they require such an application.

Moller has a patent upon his process; therefore, his method is only given in general, otherwise there would be no protection for him.

DR. J. SCHNAUSS.

TO SET THINGS RIGHT.

BY M H. ALBEE.

THE following communication is written because of the burning desire to have credit rendered to those who are the actual workers in the examples you and others publish for our benefit.

In none of the examples put forth in the magazines that I can remember, is there any mention of any but the proprietor of the gallery from which the work emanates. Only in very rare instances is any credit given others.

Now, in justice to the scene-painter, papier-maché worker, operator, printer, and retoucher, due credit should be awarded them, and the production should not be buried in one name without even a mention of assistants, and for that matter, the entire production, for aught we know, in some instances, is due to others than the one specified. Only inasmuch as he occupies the position of manager is he entitled to mention, for no part has his hands wrought out the essential elements of the work. As business managers they deserve all credit for their enterprise and the successful manipulation of the public. As to their art qualities, I will not speak only as the examples display them. And now, as I have tried to put things in their right light as concerns truth and justice, I would speak of the mismanagement of the accessories as displayed in the examples put before us for our criticism. Take that mosaic in the December number of the PHILADELPHIA PHOTOGRAPHER, where the lady is about to enter the porch. In every way but one it is perfection as a photographic production, but that one thing mars it. She is a giantess, and if one more step is taken either she "stoops to conquer," or the scenepainter's art must give way to let her pass.

There is one other of a similar nature in the setting, but the centre picture is something grand to contemplate. The choice of accessories and background displays an artistic mind in the operator, and only the transition from light to deep shadow, without detail, as would be rendered if a painter were to represent the scene, is open to objection. But for such shortcomings photography is not responsible.

There is one example in the St. Louis Journal I would speak of. The fault is so glaring I wonder the operator's eye was not offended before the result was produced. It represents a young lady with a sunshade poised before; a beautiful setting of the scenepainter's art, representing house, lawn, and foreground. All is pleasing to contemplate but the ugly line of background and the grass-plot of foreground, which give one the impression that grass has grown up in an instant in the driveway, and a plowman seeing it would turn up the avenue, or turn a furrow to prevent any further encroachment on that domain. Faults of like character often happen, but more especially do they occur because of their being half paid and hurrying on to get the next quarter, a condition too often the case all over our fair land, and one that does not encourage the development of art in our noble calling. But if you, as instructor, keep on giving us examples for consideration, and knock off the barnacles from the hulk of our now old ark, photography, she will be a better sailing craft for the pruning.

The war of prices has commenced in earnest in our town; cabinets down to three dollars. The old story. Sold out—new man in place at prices that defy competition. Old stagers come down to meet him, but I intend to hold the fort at five dollars if crackers and cheese will fatten, for I have no help to pay nor children to feed.

There is no use in disguising the truth; if you try to palm yourself off for more than you are worth you will eventually wake up to the knowledge of what others knew before. How often when we dive down to the bottom of things we discover the thinness of the covering, and realize how much there is of show and deceit in this world of ours. Every one is seeking to outshine his neighbor by appropriating whatever he can to himself, that he may shine the brighter while the world remains ignorant of what his real worth is. One of the real lessons of the hour is to see rightly, and this can only be done by observation and a sifting of ways and means that will eventually place a just estimate on all things which challenge our criticism.

THOUGHTS ABOUT AMATEURS.

BY ROBERT T. TRAMOH.

This morning, as it is raining and dark, having nothing to do, and believing that when a photographer cannot work he should read up about his profession—not only about his own branch, but all branches appertaining to it—it accordingly occurred to me to read the *Mosaics* for 1884, for every time I reread the *Mosaics* of any year I learn something new.

Well, I got along to the subject "Talk about Things Generally," and I read the following, which set me to thinking, and, induced me to write this letter for the benefit of the profession: "The amateur photographer seems to be increasing as rapidly as has the English sparrow in our country, and we believe the same improvement in health and comfort is going to follow. The English sparrows were imported, at first, to rid us of the troublesome worms which used to turn us from our walk in life as they dangled down from our shade-trees, and crept over our persons. The birds did their work effectually, and we are no more troubled with caterpillars. So will the amateur serve to destroy the worms in our art, and preserve and keep the beautiful, which will remain."

Let us reflect. Since the introduction of English sparrows into this country, they have increased greatly; they have destroyed the dreaded crawling and flying insects. Not satisfied with that, they have turned upon our home birds that used to warble so sweetly, sending joy into every heart by their glad notes of spring, and have driven them away; not satisfied with this, they are constantly fighting amongst themselves, and are properly called the "little English fighting cock." So, after all, what they have cured in one way, they have killed in another. Now, if the amateurs are going to increase so rapidly, and follow the course of the sparrow, I think it is high time for the photographer to stand up for his rights. While we agree with Dr. Vogel that we are indebted to amateurs for the amount of knowledge we have accumulated, we do most emphatically say that we have something to fear, and we cannot say, God bless them as a class, for the most of them, instead of elevating our profession, have degraded

it. I hardly think that, within the last half a dozen years, any other profession has been so raided upon by a class of conceited individuals as has photography; and yet the majority of this class, after a little experience, claim that they have been duped, and are the loudest in their cry that all photographers are frauds. Dr. Vogel says that Germany is the most musical land in the world because they have so many amateurs. But he does not say that these amateurs have studied under eminent directors, and did not learn "the whole business for ten dollars." Of course, they are esteemed. Why? Because they do, or rather, must, pay for the service rendered.

It is not my object to condemn amateurs who have done so much for the elevation of photography. When I recall to mind the men in Europe-Dr. Vogel, Leon Vidal, Captains Abney and Waterhouse, and the editors of Photographic News and of Year-Book, and in this country the editors of the PHILADELPHIA PHOTOGRAPHER and the Photographic Times, and a few others - I can say, God bless them. But the class which I am bitterly opposed to, and which is increasing rapidly, and must ere long force the profession to retire in disgust, will be found at watering-places and pleasure resorts in the summer time. You see them with their outfits, ranging in value from \$10.00 to \$125.00, firing away at anything they may fancy, no matter in what position the sun may be. They cannot develop their plates, or print from the negatives; so they get some poor inland photographer to develop, print, mount, and finish for them at the exceedingly low rate of eight and a half cents apiece. This is not exaggeration; I know it to be a fact, for I have seen and heard the same offer made repeatedly. When these prints are finished, he (the amateur) takes them to his friends, who tell him that they are excellent (the professional would have thrown them in the waste), and really excel those of the men who make a living by making pictures. Our amateur gets conceited, and thinks he knows it all. This puts me in mind of an incident which occurred last summer, when I was making some views around Pomfort, Conn. (for I am a view photographer, an itinerant). I

was met there by several amateurs. One of them was with me while I made several exposures. I was using the wet plate, for I found that it was the best for the work that I was doing. After a little conversation, I found out that he had an outfit (amateur's), but he did not understand the method of the wet process. He said he knew all about photography by the dry plate; he could do this and that. I got interested, and told him that I had followed the profession for quite a little time, and did not know much about it, but would be much obliged to him if he would tell me where I could learn. He said, "Oh, that is easy enough. I bought my outfit at a stock-house in New York, paying twenty-five dollars for the whole; I had one book, entitled How to Make Pictures, thrown in, and I bought another, The Amateur Photographer, paying fifteen cents for it." I said nothing, but thanked him. I have only quoted the above to show you the conceit of amateurs. I have again and again met the same kind of amateurs. This is the class which is doing so much harm; this is the class that is coming into the field and gallery, and are now becoming the levers by which unscrupulous men pull down prices; this class has no practical experience, only book knowledge. Hence, they, after a while, hire out for eight dollars per week, and their employers can very easily cut prices, and let cabinets go for \$1.50 per dozen. This is the class that is robbing our customers, and causing them to look with disgust upon our best work. What, then, is the cause of all this trouble? Is it dry plates? No. What then? Is it the stockdealer? No! Yes; when they advertise that anybody can make pictures, they advertise that which is false. Everybody can not make pictures. Successful photographers are born; the art is born into them. For amusement you may say; but I cannot perceive the amusement of throwing money down the sink, and getting no return. Let the stock-houses, then, stop advertising falsely, and come out upon the broad plain of truth. Let our journals, instead of lauding amateur photographic exhibitions, turn around and see what they can do towards encouraging exhibitions of a similar nature where prizes are to be awarded to professionals, and thereby cultivate ambition for general excellence amongst those who make the business the means of earning a living, and not amusement. Then will we be able to go on more and more, and there will be no need of amateur help.

Now, sir, I hope you will please give me space in your highly esteemed journal. I have read it a long time; but never until now have I felt like writing for it. It is only because I see the evil which the stockhouses are unknowingly doing to our craft, and, therefore, write a sort of warning. I shall attend the next meeting at Cincinnati, and probably read a paper which I shall prepare.

THE AIR-BRUSH.

WE call attention once more to this useful invention because of the great pains which the Air-Brush Manufacturing Company really exercise in perfecting their instrument, and in making it all they claim. Some undoubted testimonials are sent us by the Company, and recently we had the pleasure of seeing the apparatus demonstrated in our own city. Any photographer doing "artist" work will find the air-brush of great service to him. The results which the agents show are evidence, too, of the excellence of the apparatus. We cannot see how the air-brush instrument can become an instrument "for cheapening work and producing results which will not be artistic." The real fact of the case is, that it can only be used by an artist who has ability to think. At a recent meeting of the Illinois Photographers' Association Mr. McEntree, of the Air-Brush Company, demonstrated the use of the instrument, after which the managers visited the collection in the rooms of the Bohemian Art Club. The result of this was the gathering in of the opinions of several leading artists, and the approval of many photographers, portrait painters, and others. Even those who have been heretofore prejudiced against mechanical appliances that would conflict with or weaken the free hand of the artist, have accepted this new-born novelty, and are free in their unqualified praise of it as a rapid-working auxiliary in the

hands of artists who work in crayon and liquid colors.

USEFUL ENGAGEMENT CARDS.

Below we give pattern for engagement cards, sent us by Mr. Sedgwick, of Zanesville, Ohio. They may be useful to a num-

should I not? In my room, one week ago, last Saturday, I made some twenty exposures of scenes representing childhood, children at play, etc. In the evening I tried to develop them by the quickest method known to me, and lost three gems in succession. Cause: under-exposure of half a second on

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ENGAGEMENT CARD.

SEDGWICK'S GALLERY,

On ____ at ___ m.

It is expected, that in your engagement, you will be Punctual. Should you not be able to fill your appointment, please notify ns. We shall do all in our power to please you, but do not ask us to make sittings "just to see how it looks."

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ber of our readers, and help them to get more encouragement from their patrons. They will explain themselves. Appropriate stubs are attached for retention by the artist.

THE DRY FEVER.

A PHOTOGRAPHER who was long wedded to his "wet" work and hard to persuade away from it, now writes us as follows:

"Yes, I have a 'dry fever,' and why

a snowy, dark day. This would not do at all, so the brains had to work for a while, and after half an hour I succeeded in saving every one of the plates, with ample time and splendid detail. I made one hundred and twenty-five exposures last week, and did not have a day but what it stormed more or less, and yet I did not lose a single negative from under-exposure. The time was from half a second to a second. I am now dry all the time."

THE MIDNIGHT METEOR PICTURE.

Some time ago we noticed a stereoscopic moonlight view sent us by Mr. Charles E. Emery, of Silver Cliff, Colorado, wherein could be seen in the distant sky, and stereoscopically away beyond the snow-clad mountains, what seemed to be in effect the track of a falling meteor. It is a puzzle to the scientist as well as to the photographer who took the view. Mr. Emery says, in his letter, "I thought at first that possibly something might have reflected on to the lenses during the exposure, but the view was made from the roof of my gallery, and there is nothing, I can assure you, in the vicinity that would cause such an effect on the plate. You will notice on the supposed meteor that it shows lightest at the starting point, where it is naturally the brightest, and, of course, the falling of the meteor was almost instantaneous, while the plate was exposed four hours and fifteen minutes. It seems to me, then, that the flash of the meteor would be darker than the sky from the fact of the short exposure it had. Of course, if I am deceived, I will be glad to be undeceived, and will be interested to know what some of our learned men say, if they will favor us with an opinion."

We have consulted with one or two scientists on this subject, and are waiting for responses from others. One noted professor says, "I put little confidence in my own opinion about it. There are certain difficulties in accepting what is claimed for it. First, red or white-hot bodies-as all meteors in fragments are in the lower atmosphere—ought to photograph as a white streak. Moreover, any defect on the glass or dry plate would make a dark line like the one in the print. Secondly, assuming -what is scarcely probable-that the body was non-luminous, my guess would be that it would print lighter than the sky in this position as lighted by moonlight, but perhaps I am wrong in this."

Prof. C. Piazzi Smyth, the distinguished Astronomer-Royal of Scotland, writes us on the subject as follows: "The photographic curiosity wants some explanation. As a plate taken in nothing but moonlight, it is

marvellously ahead of the wet collodion and silvered bath views. As a view of the Rocky Mountains in any light, it is grand and delightful too, and the real perspective very soft; but the sky appears to have been worked upon or tinted, and the stars are all false ones. Notwithstanding, the meteor track is a very notable effect. There is a perspective in its track true to a shooting star going past the earth which I doubt if any artist could have put in so perfectly and alike in both views. Also the luminous effect at the beginning of the track. But why is the greater part of the track black rather than white? Was the meteor so bright that it solarized the sensitive surface? Oh! that the Denver photographer had had his cameras one hundred feet apart instead of two and a half inches, to get the distance of such a phenomenon beyond the Rocky Mountain Tops."

Prof. S. P. Langley, of the Alleghany Observatory, was also quite mystified by the effect of this meteor picture, and would scarcely endeavor to explain it. It seemed plausible, and he would not say that it was impossible. The light of the meteors varies from red to yellow, and so on, and this one may have been either of these colors.

The opinion below is from a gentleman who professes to be an expert, and which we give for what it is worth. We are quite sure he is in error in some of his guesses. Altogether, we are at a loss yet to understand what it was that Mr. Emery secured in the sky of his negative.

"I return the photo which you sent me by this mail, with thanks. I doubt if the line upon it was caused by a meteor, and I doubt if the view was taken by moonlight. I do not think, in the first place, that any meteor would give out such an overwhelming amount of red rays as to entirely overpower the other end of the spectrum. Even a red-hot coal fire takes decidedly white in the daytime. Secondly, I don't see, if the meteor was exposed long enough to have the red rays take an effect, why such a marvellously sensitive plate should not show the trails of the brighter stars upon it.

"I should explain the plate thus: It was exposed early in the morning, perhaps ten

o'clock, on a rather hazy day—judging by the shadows. The camera was then left in place till evening, and the lights taken. The 'meteor' track, which you will notice is double at the top, was made by two scratches with a knife on a sky negative, and printed in with tissue-paper, as clouds are often printed in, the upper extremity of the track being produced by a touch of rouge or lake. The photographer may have adopted some other method, perhaps, but by this means a photograph similar to this one could, undoubtedly, be produced."

SOCIETY GOSSIP.

THE PHOTOGRAPHIC SOCIETY OF PHILA-DELPHIA.—The regular meeting was held on Wednesday evening, May 7, 1884. The President, Mr. Joseph W. Bates, in the chair. Forty-six members and four visitors were present.

The Excursion Committee reported that two single-day tug-boat excursions had been made, one on the Delaware River and one to New York Harbor. Both were well attended and good results were obtained. Arrangements were in progress for the annual trip of the Society, which would occupy about ten days, beginning May 19th. It was proposed to make Asheville, N. C., the objective point.

The Public Lantern Committee made a report regarding the exhibition held April 16th, at Association Hall. Slides selected from the work of nineteen members were shown, together with some specimens of foreign work. The report was unanimously accepted, and the Committee discharged with the thanks of the Society.

The following gentlemen were elected active members: Messrs. W. West Randall, Ellwood H. Newell, Randall T. Hazzard, I. Norris Cochran, Jacob Eckfeldt, and David Pepper, Jr.

A letter of resignation was received from Dr. Carl Seiler.

The Secretary announced the presentation to the Society, by the publishers, of a copy of *The Amateur Photographer*, by Dr. Ellerslie Wallace, Jr.

A question in the box asked if a Japanned iron tray would answer for silvering paper.

It was not considered suitable unless the Japanning was perfectly free from cracks, though if kept well coated with shellac it might answer.

Mr. Browne spoke of the difficulty experienced in finding a paste for mounting which would keep, and gave the following recipe for flour paste as used by Dr. Camac, and which he had found to keep perfectly: Dissolve one-half teaspoonful of alum in a pint of hot water; when cold, stir in enough flour to make the mixture as thick as cream. Break up all lumps by constantly stirring, then add a small pinch of powdered rosin. Put a saucepan on the stove, and in it place a teacupful of boiling water, then stir in the mixture. Stir constantly so that it shall not burn. When about the thickness of mush pour into a glass bottle or jar. When cool it will be quite stiff. When needed for use take out a little and soften with warm water. A little carbolic acid or oil of cassia may be added to the warm mixture before bottling, to assist in preserving it.

Mr. Wallace had found the addition of salicylic acid to paste to preserve it very effectually.

Mr. Samuel Sartain thought that paste frequently spoiled owing to contamination from particles of foreign matter getting into it, such as bits of glue, etc., from the brush.

Mr. Fassit recommended, when a gelatine plate was known to be overexposed, or to have a tendency to fog, that before development it be soaked a few moments in a five or ten grain solution of bromide of potassium, the idea being that in this way the restraining power of the bromide operated on the plate before the developer had a chance to produce fog.

The committee appointed to select the presentation pictures for 1884, reported that they had chosen from the work of members of less than two years' standing, "Bass-fishing on the Elk River, W. Va.," by Dr. J. M. Jordan, and of that of other members, an instantaneous view of "Chickens Feeding," by Mr. W. D. H. Wilson.

Some excellent instantaneous work with a Darlot Rapid Hemispherical Lens, was shown by Mr. David Pepper, Jr. They represented athletes leaping, etc., the figures being caught in mid-air very successfully.

After a lantern exhibition, the meeting adjourned. ROBERT S. REDFIELD,

Secretary.

Association of Operative Photographers of New York.—Regular meeting, April 2, 1884, held in the rooms of the Society, 392 Bowery. President Atwood in the Chair.

Minutes of last meeting read and approved.

Mr. Atwood requested Mr. Jahr to read the paper to be given to the Association on the lighting of the developing-room.

Mr. Jahr asked for the indulgence of the members, as he had not prepared the paper on the subject, and hoped it would be deferred till next discussion meeting.

It was decided, on motion, that Mr. Jahr should be granted time till next discussion meeting.

Mr. Roche showed to the members two negatives he had made, developed by a peculiar formula. He had taken all the known developers, and put them all together and developed the plates he had on exhibition. They were good, clean negatives.

Mr. Jahr: I would like to ask Mr. Roche for the formula. I prefer a grayish yellow. You want a fine, clear plate to print quick. If there is a developer that can be given to us to do that I would consider it a great boon to photographers.

Mr. Roche: I will give the formula, it is as follows:

No. 1: Water, 30 ounces; pyro, 90 grains. To keep the pyro, oxalic acid, 10 grains.

No. 2: Water, 20 ounces; pure carbonate of potash, 600 grains; pure carbonate of soda, 400 grains; sulphide of soda, 100 grains; liquid ammonia, ½ ounce.

For a $6\frac{1}{2}$ x $8\frac{1}{2}$ plate, take 3 ounces of No. 1 and add $1\frac{1}{2}$ ounce of No. 2. If your plate don't come out, all you have to do is to put in more of the alkaline solution.

Mr. Jahr: The normal sulphide of soda is alkaline, and contains a certain amount of carbonate of soda. When you want to keep a pyro solution, you have to make it acid, which is a detriment. Put for 1

ounce of pyro, 30 grains of citric or nitric acid. It is best to have your pyro dry. Dissolve your pyro, just enough for the morning; then, fresh again for the afternoon, but do not keep it till next day, as having it acid makes it a restrainer. 2 grains of sulphide of soda and 1 grain of pyro make a nice color for a plate. Keep your solution with ammonia where it was little acid as possible.

Mr. Buehler: I can never get rid of the yellow color. I make up the formula as near as possible. I have come near to it with ammonia, but I give the preference to the carbonate of soda.

Mr. Roche: 1 ounce of alum; 1 ounce of citric acid; dissolve and filter. Take your plate after it is fixed and place it in the solution; it makes it firm. If you take any gelatine plate for very fine work, they are not good, they are too coarse. Old collodion is the finest. Mr. Buehler has been asking for a formula for getting rid of the yellow color. That depends upon the plate vou use. Take 1 ounce of alum, 1 ounce of citric acid, and 20 ounces of sulphide of iron; then fix, wash well, and place in the clearing solution a minute, then wash. There is no staining of the shadows, and do not wash too well when taking out of the hypo. When you develop a plate with pyro you get a finer grain than with iron. I examine my emulsion under a microscope. The more you cook the emulsion the coarser the grain.

Mr. Jahr: Captain Abney has written a paper on the adaptability of gelatine plates for microscopic work. It all depends on the emulsion; if you want a very fine grain, do not take a very sensitive plate—the more sensitive the plate the coarser the grain.

Mr. Atwood: If one plate is intense and the other weak, it shows that there is no uniformity. I can print twelve prints in one day, in a big frame an inch and a half deep, from the negatives before you, and will give you the formula for developing which is used in our gallery:

No. 1: Water, 32 ounces; pyro, 90 grains; bromide of potassium, 45 grains; 12 drops of nitric acid.

No. 2: Water, 32 ounces; $2\frac{1}{2}$ drachms of liquid ammonia.

Developer: No. 1, $2\frac{1}{2}$ ounces; No. 2, 1 ounce.

After a lengthy discussion, the meeting adjourned.

T. W. POWER, Secretary.

May 7, 1884. President Atwood in the Chair.

Minutes of last meeting read and approved.

PHILADELPHIA PHOTOGRAPHER for May received with thanks.

Mr. Atwood handed in his resignation as presiding officer; he having become a proprietor, which debars him from holding the office.

Mr. Jahr, who was to have read a paper before the Association, could not do so, as he was not prepared, in consequence of unforeseen circumstances. He said the subject was being discussed all over the world. Mr. Debenhauer thinks yellow and green the best light for the most sensitive plates. Some, again, uphold ruby. Captain Abney, again, thinks that the real stained red, flashed or stained with gold, making for it a red yellowish color is the best light for plates. As soon as he received the samples of glass he would give results, and he thought it was only wasting time now to be speaking about it.

Mr. Schaidner, Chairman of the Literary Committee, said that he thought as there was no special subject on hand, it would be well to take up the prints sent by a photographer who was having trouble, and find out the cause.

Mr. Atwood said that he knew of plenty of people having trouble with the paper and baths, and he himself was in the habit of using an alkaline bath, but on account of the weather had used it a little acid, and got mottled prints. In so doing he came back to slightly alkaline again, and got over the trouble. He considered most of the albumen paper we are getting nowadays as of a very poor quality.

Mr. Schaidner: We had a ream of paper that went through the same process as formerly, yet we could not get good prints. When the printer toned he used to get blotches and sores all over his hands. We tried Hovey's paper and the silver bath

turned yellow. We found that the "N. P. A." paper worked the best.

Mr. Buehler: In our gallery we have the same trouble with the paper; it comes out yellowish.

Mr. Atwood: A friend of mine showed me his hands, they were sore from the manipulation of prints. I thought they were poisoned from the chloride of gold. In regard to these prints, it is hard to judge from them the cause. I think he has doctored his bath with some foreign matter, and it is out of order, which can be got over by boiling down. It would also be well for him to dispense with the sal soda; the kind most used by photographers is obtained from grocery stores, and is impure and not fit for our purpose.

Mr. Mildenbérger: If my prints came out that way I would make a new bath. If a gold bath did not work right, I would change the formula. When I use sal soda I get pure carbonate of soda.

Mr. Buehler: I think cold weather is apt to produce a flatness in prints.

Mr. Mildenberger: I make the temperature in my room very high before I silver; it is more sensible to wait till the room is warm than to silver in a cold room and then throw the prints away after all the trouble you have gone through. I think that silvering in a cold room softens the albumen.

Mr. Mayne: Can you make the bath alkaline with sal soda? On the back of the prints it says that the bath was made alkaline with sal soda. If you add sal soda, you form carbonate of silver. If you test the bath next day, you will find it neutral.

Mr. Heckel: From the appearance of the prints, they look as if they had been toned in a bath with chloride of silver in it.

The Secretary promised to enlighten the brother photographer as much as possible, after which the meeting adjourned.

T. W. POWER, Secretary.

THE LOWELL ASSOCIATION OF AMATEUR PHOTOGRAPHERS met, by invitation, at the studio of Mr. N. C. Sanborn Thursday evening, May 15th, and were entertained with a demonstration of developing by Mr. Sanborn, who used his new formula and

Pyro,

unce.

produced some fine results. Sample negatives and prints were exhibited by several members. Five new members were received. Mr. Charles E Edson was elected Librarian, and thanks for publications given to the Association were voted to Messrs. Edward L. Wilson, Philadelphia; Scovill Manufacturing Co., New York; E. & H. T. Anthony & Co., New York; Rochester Optical Co., Rochester, N. Y.; and Mrs. J. H. Fitzgibbons, St. Louis. Mr. Sanborn also received a vote of thanks for his courtesy.

ROCHESTER PHOTOGRAPHIC ASSOCIA-TION. — Regular semi-monthly meeting, Monday evening, March 24, 1884.

Mr. E. Rockwood, of New York, was introduced to the members by Mr. Wardlaw.

The President announced the subject for discussion: The carbonate of soda developer; what are its advantages over the plain pyro and ammonia? A long debate followed.

Mr. Nelson: Can as much latitude be given with soda as with the pyro and ammonia?

Mr. Wardlaw had tried the carbonate of soda developer in connection with the sulphite of soda. He liked the developer very well; the tone of the negative was very good, although not quite the color he preferred. The formula he had used was Mr. Cooper's, as follows:

Solution No. 1.

Sulphite	of Sod	ium,	Crys	tals,		÷	pound.
Distilled	Water	•,				2	quarts.
Pyro,						2	ounces
		C 7			_		

Solution No. 2.

Washing Soda, .			½ pound.
Water from Tap,			2 quarts.

Mr. Eastman said, in regard to the claim of carbonate of soda bringing more out of a plate than ammonia, that he had never seen the claim substantiated, although he had frequently seen it tried.

Mr. Wardlaw requested Mr. Rockwood to give his manner of developing dry plates.

Mr. Rockwood said the formula he used was one taken from the *Bulletin*; it was as follows:

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Citric Acid,		60 grains.
Sulphite of Sodium,		$1\frac{1}{2}$ ounce.
Water		19 ounges

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No. 2.

Epsom 8	Salts,			3 ounces
Water.				8 ounces

Use ½ ounce of each in 12 ounces of water.

This formula, he said, worked excellently in his hands. The negatives, as developed with this formula, gave excellent wet-plate effects, and, on the whole, it was easily worked.

Mr. Monroe. The formula which I have, although not wholly original, is arranged to embrace simplicity in use together with economy and desirable color. I also find that by using sulphurous acid instead of sulphuric (although it takes more) that the solution does not change on exposure to air. It can also be used on a dozen or more successive plates, and by pouring it back into a bottle and corking it, no scum can form on the surface—thereby enabling one to use it several hours after mixture. This is the formula:

No. 1.

Sulp	hite of	Sodium,	Crys	stals,		4	ounces.
Hot	Water,					11	ounces.

No. 2.

Carbonate of Soda, Pure,		31 ounces
Sulphite of Sodium, .		$\frac{3}{4}$ ounce.
Water.		64 ounces

When dissolved and cool, add from $3\frac{1}{2}$ to 4 ounces of sulphurous acid, sufficient to show red by testing with litmus paper; pyrogallic acid (dry), 1 ounce. Then filter.

To use, take one drachm of No. 1 to each ounce of No. 2, and by using more or less of No. 1, any change in density may be secured.

Mr. Inglis: I have found that with the carbonate of soda I can get greater density than with ammonia in its normal state; of course, any degree of density can be obtained with ammonia as well, by adding more or less bromide. Mr. Inglis gave his carbonate of soda formula, as follows:

Add dry pyro, 4 to 5 grains.

Mr. Monroe said: If (in using his formula) the plate is found over-exposed, pour over it a solution containing two per cent of bromide of ammonium, then, without washing, place it back again into the developer. Any degree of density may be obtained.

APRIL 21, 1884. The President, J. M. Fox, in the Chair.

Mr. James Inglis said, in answer to the question, "Is it better to use quick or slow plates in taking views?" that he was of the opinion that plates could not be made too quick. In England, plates with an exposure of six seconds sold for about double the price of plates requiring twenty seconds exposure, which would prove that English photographers preferred the quick plates.

Mr. Mawdsley was decidedly of the opinion that rapid plates were preferable for viewing.

Silvering paper, and removing the surplus silver from the sheet by drawing it over a glass rod, was next discussed at length.

Mr. Nelson had seen several articles recently, advocating the washing of silvered paper by drawing the sheet through a pan of water after silvering. He had tried it, and found the plan worked well on general principles.

The President asked for the experience of members regarding the fuming of paper, and the proper length of time to fume. He had sometimes been obliged to fume an hour and a half.

Mr. Nelson suggested that the dish be warmed slightly during the operation.

The President said that the paper he used refused to print properly with less fuming.

Mr Wardlaw: You did the mischief with your little rod. I prefer to silver and fume albumen paper as the temperature shall decide. Mr. Wardlaw said that he had lately been experimenting, with good success, with a formula for reducing strong negatives. He used about one grain of permanganate of potash, six ounces of water, and one or two drops of nitric acid. He thought the formula, when properly used, would assist many who made strong negatives to reduce them.

Mr. Lee had tried the above plan, and found that it did the work of reducing well. He had also used it for removing the stains of pyro from the hands, and found it excellent for that purpose; it leaves no stain of its own.

Mr. Wardlaw thought that the proportions might have to be varied slightly, but he had used those given above.

Mr. Marsau (who had lately returned from South America) gave some interesting facts in regard to photography in that country. He had found that as good pictures were made there as here, and the photographers are very expert in working the dry plates, which they have used for upwards of a year and a half. The majority of the plates in use are of English manufacture; still, American plates are used. The length of time seemed to be about the same as in working here; but three hundred and twenty days out of the three hundred and sixty-five are clear in Chili.

Mr. Inglis did not want such very bright sunlight.

Mr. Mawdsley agreed with Mr. Inglis; he thought light, fleecy clouds in the sky gave a better effect.

May 5, 1884. After the reading of the reports of the Secretary and Treasurer, which were accepted, the following officers of the Association were elected for the ensuing year:

President.—J. M. Fox.

Vice-President.—Charles T. Pomeroy.

Secretary.—William J. Lee.

Treasurer .- S. D. Wardlaw.

Members of the Executive Committee.—George Bacon, W. S. Nelson.

Finance Committee.—Willis Jaynes, Fred. Stone, Willis Bannister.

During a short recess which followed the election of officers, a detective camera and several different drop-shutters were exhibited, and examined by the members.

Oh reassembling, the question, "What causes large blisters?" was taken up, and Mr. Bostwick, to whom the question was referred, thought that they were caused by being placed in too strong hypo.

Mr. Hoover said that the blisters were largely owing to a change of temperature.

As a rule, the hypo bath should be mixed the day before it was to be used. When it is freshly made the temperature is lowered, and when the temperature is raised gas is formed, causing the blisters.

Mr. Wardlaw thought that the hypo should be dissolved and left in the dish for twenty-four hours; in that case blisters will seldom be formed. He had found that if the blisters are taken off, the albumen will be found to have stretched.

The President said that he had experimented with four different kinds of paper: one was free from blisters; the other three blistered. He thought that acetic acid should be used after taking the prints from the soda bath.

Mr. Wardlaw had experimented with citric acid, and found that so much sulphur was liberated that the prints were discolored and spoiled. He had found that where alum was used the prints could not be burnished satisfactorily.

Mr. Hoover had found that where the prints were taken from the soda bath and placed, with the face up, in a clear water bath, and allowed to remain until they sank, no blisters would be produced.

An extended discussion followed on the question, "What causes bubbles in the pyro developer?"

Mr. Lee said that they were not caused by the glycerine; for if they were they would appear on the first plate.

Mr. Inglis said that he never attributed them to the developer, but to the method of manipulation. If the developer is used frequently, bubbles are apt to be produced. He had noticed, after developing a plate, placing it in the fixing bath, and bringing it to the light, that parts were not fixed. After putting it back in the fixing bath, these portions become fixed at once. In such cases it is something on the plate, and not bubbles, that causes the trouble.

Mr. Eastman said that if a plate is held up the moisture will recede in spots; then, if the plate is placed in the solution again, it will not act on these spots. Said spots are caused by the action of the air on the surface, which prevents the action of the solution. When a developer contains ammonia, which is a solvent of gelatine, after

the developer has been used it will contain portions of gelatine, and cause air-bubbles. All alkalies are solvents of gelatine.

The following questions were submitted for discussion at the next meeting:

"What causes blue marks and white spots on gelatino-bromide paper?"

"With a group of three to make—a lady dressed in black, a man ditto, and a child in white; the lady is of light complexion, the child the same, and the man dark—How to develop?

The Society then adjourned for two weeks.

GERMAN PHOTOGRAPHIC SOCIETY OF NEW YORK.—The regular meeting of this Society was held on May 9, 1884, Vice-President Vintscher occupying the Chair.

The thanks of the Society were voted to Mr. Edward L. Wilson, for sending The Philadelphia Photographer; to Messrs Anthony & Co., for *The Bulletin* and the loan of the new photo-enlarging apparatus; and to W. Irving Adams, Esq., agent of the Scovill Manufacturing Company, for *The Photographic Times* and Dr. Eder's Chemical Effect of the Spectrum.

The subject for the evening was Enlargements, by means of the solar camera upon bromo-gelatine paper.

Mr. Jahr: The courtesy of Messrs Anthony & Co. supplied us this evening with one of their new enlarging cameras, and I should like, before we proceed, to make a few specimens to explain it to you.

As you see, this apparatus is very simple in construction, and is chiefly intended to make enlargements on bromo-gelatine paper by artificial light; but is also very useful in making lantern transparencies, and on account of the non-actinic glass panel on one side, will do well as a dark-room lantern, so that we can develop right here by the same light, without needing another lamp. The relative positions of negative and condensing lens can be easily changed.

The paper we are going to use, is made by coating our ordinary photographic paper with argento-bromide gelatine emulsion, but is enamelled with an emulsion of sulphate of barium before coating it with the sensitive film, thus overcoming the dulness which would result without it.

This is the same paper we used in our last meeting for making some contact prints, and for the sake of those members who were not here to see those highly interesting experiments, I shall give a short repetition.

We exposed several pieces of this paper under negatives in ordinary printing frames, to the gaslight, from ten to sixty seconds; also to the flash of a match; then we developed with

Neutral Oxalate of Potash, . 3 ounces.

'Protosulphite of Iron, . ½ ounce.

(Both saturated solutions.)

Bromide of Potassium, . . ¼ drachm.

(12 grains to the ounce.)

The developing has to be carried only so far as to bring out all the details, then washed and fixed as usual. All our prints proved to be good and showed the big margin we have in timing, if developed properly.

The use of this paper is almost unlimited for scientific purposes as well as gallery use. For example, you can, by means of this camera, almost in no time, make a proof from a wet or dry plate, and can show it to your customers before they leave the gallery.

The committee appointed was now ready for work, and proceeded to make two pictures nearly life-size, by an exposure of one minute on the extra-rapid, and fifteen minutes on the ordinary sensitive paper. The developing was similar to that of the smaller pictures, and had the same good result.

A member put the question, "If the price will allow of its being used instead of the albumen paper?" and was answered by Mr. Jahr, that it is not likely to interfere any with the mode of printing now in use, but will have its own position, on its own particular merits.

Adjourned. Lubwig Schill, Secretary.

THE SOCIETY OF AMATEUR PHOTOGRAPHERS OF NEW YORK.—Regular meeting, May 13th.

After the routine business had been trans-

acted, the subject of the future work of the Association was discussed. Dr. John H. Janeway gave the details of a plan he had, which will be shaped into a paper for our next issue.

Mr. Gilder followed Dr. Janeway, and showed to the members a camera fitted up with his shutter, which he had improved since it was shown at the last meeting. He had added a spring and a trigger, thereby making the shutter work automatically on pulling the string. The attachment permitted the upper shutter to be retained in an inclined position over the front of the lens like a bonnet or sky shade, thereby cutting off the sky and allowing more exposure in the foreground. The spring could be detached and the shutter operated by the fingers, as explained at the last meeting. Mr. Gilder's offer to give the amateurs the benefit of his labor was applauded by all present.

The President next showed and explained an improved cheap camera, which had been sent by the Rochester Optical Company, of Rochester, N. Y. Although a 5 x 8 camera, it was as light as many made to take 4 x 5 pictures. The camera was provided with a rising front, adjustable diaphragms for the single lens, a swing-back, a hinged groundglass, and a folding bed. A separate attachment on the tripod allowed the camera to be held endwise, making it easy to take a picture either way. The wood-work was of polished cherry and the metal trimmings were nickel-plated, giving to the camera a very neat and attractive appearance. The plate-holder was as simple as the camera; it consisted of a frame divided by a metal partition. Inserted on the inside of the frame, next to each side of the partition, were three metal pegs with bevel-shaped notches in their ends. One pin was movable and was actuated by a spring. To put in the plate you simply drew the slide and dropped the plate, film side towards you, into the two lower stationary pegs, and pulled out the upper pin with the fingers, letting it fly back after the plate had dropped into the notch. The plate was then held clamped between three pins. Among the advantages of the holder were its simplicity, its adjustability to various

thicknesses and widths of glass—an important advantage when the carelessness of manufacturers is considered—and, lastly, but a small fraction of the sensitive surface of the plate is cut off.

Mr. Beach next explained and lighted up a new enlarging camera recently patented by Mr. T. C. Roche, and kindly sent to the Society for exhibition by Messrs. E. & H. T. Anthony & Co. The advantages claimed for it were the ease and facility with which negatives could be enlarged upon bromoargentic gelatine paper. It consisted of a box whose interior sides were provided with a series of vertical grooves to hold the negative and condensing lens, permitting them to be adjusted easily with reference to each other. The lens-front formed part of a bellows attached to the front of the box, and was easily moved back and forth by a slide under the bottom of the box. By this means the picture could be readily focussed. A common kerosene lamp with a reflector, in the rear of the box, furnished enough light to make the picture. The top of the box was provided with a cover, which allowed easy access to the negative and condenser. In the sides of the box opposite to the lamp were panes of ruby glass, the object being to provide a non-actinic light for development.

A permanent room has been secured, which will enable the Society to do something in the way of giving a few interesting experiments in photography.

F. C. BEACH, President.

THE COPYRIGHT OF PHOTO-GRAPHS.

BY TALCOTT WILLIAMS, Editor of the Phila. Daily *Press*.

Mr. Napoleon Sarony has done wide service to artistic photography in the United States by his work in the studio, but it may be questioned if he has ever rendered a more important service than in fighting to the Supreme Court the right of a photograph to the protection of copyright.

The decision* of the Supreme Court in the

case carried up to the court of last resort by Mr. Sarony's opponent, the Burrow-Giles Lithographic Company, narrows and widens the protection of the photograph under copyright law. It widens it because it establishes, by a decision of the court of last resort, that the artistic element, the power of invention and creation, so far enters into the making of a photograph that it is subject to copyright for the same reason that a drawing, a model, a poem, or a book iseach fit matter for copyright. It narrows the protection of copyright because the Supreme Court expressed no opinion as to whether this protection would extend to a mere mechanical reproduction by photographic process of the physical features or outlines of an animate or inanimate object, where there was no originality of thought or novelty in the intellectual operations connected with its visible reproduction in the shape of a picture.

This leaves the protection of the law in this respect exactly where it was left by the decision of the lower Federal Courts in passing upon the constitutionality of the Act of 1865, extending copyright to photographs. Judge Coxe, of the Federal District Court, held in the Sarony suit, June 6, 1883,* that this Act was constitutional; but Judge Butler, three months earlier, in passing in this city-April 24, 1883+-on this point in the suit brought by Messrs. Schreiber & Sons, declined to decide whether or no Congress had the power to throw the shield of copyright about the photograph of a baby elephant. The practical legal result is that the photographer who brings to his work something more than camera and chemicals, has the unquestioned power to protect his work by copyright against all comers. In all probability the same conclusion will be reached as to all photographs

in-error, against Napoleon Sarony; in error to the Circuit Court of the United States for the Southern District of New York. The suit was one brought by Sarony against the lithographic company, under the provisions of Section 4952 of the Revised Statutes, for alleged infringement of a copyright upon a photograph of Oscar Wilde.

^{*} This decision was rendered March 17, 1884, by the Federal Supreme Court, in the case of the Burrow-Giles Lithographic Company, plaintiff-

^{*} The Daily Register, vol. 23, No. 132.

[†] Weekly Notes of Cases, vol. 13, p. 340.

by the Supreme Court; but until it is so decided this will remain in doubt.

Limited as the protection extended by the Supreme Court is, it is an advance on the past, and marks one more step in the slow march of law in the rear of discovery. Photography was unknown when the Copyright Act of 1831 was passed. Daguerre had been for seven years patiently at work, but the production of daguerrotype plates was not announced for eight years. Talbot's patent for the first negative was still ten years distant.

Copyright in photographs, like the same privilege for all artistic productions, has been for a century and a half in common law the creation of statute, not matter of right, as it should be. A man owns a cow, and its reproductions, as a matter of course; but if he draws a picture, he can only protect his property-right in that and its reproductions by establishing it in legal form and fashion under the Copyright Act. It is true that as long as a drawing, a poem, or a photograph is not "published," it is private property; * but as putting a photograph in a shop window may be publication, this protection amounts to little. The result of the artificial character of copyright property was that, in spite of the general terms of the Act of 1831, Judge Shipman decided in Wood v. Abbott+ that the privilege of copyright must be construed strictly. While the general language of the statute as to "printing" a copy might apply to photographs, the court held that, in view of their not being specifically mentioned, they must be excluded. At the same time, this did not prevent the same court from holding, at the the same term, in Rossiter v. Hall, that a photographic copy of an engraving was an infringement of the copyright in the latter. Under these two decisions, while the photographer had no protection himself, everybody else was protected against him. His work had not enough of "printing" or "reprinting" in it to get copyright; but it did have enough to create infringement as far as copyright

The Act of 1865, since incorporated in the Revised Statutes, brought any "photograph or negative thereof " under copyright protection. Many nice points involved in what constitutes a copyright of a photograph, decided in England, remain to be passed on here. Several of them were involved in the suit brought by Messrs. Schreiber & Sons of this city to recover the penalty provided by law from Messrs. Sharpless & Sons for infringement of the copyright of the former in their picture of the baby elephant "Americus." This interesting photograph was copied and used by the defendants as a label for a new brand of cambric. As the case, both in the District and Circuit courts, was decided on a side issue, it left the law of the photograph about where it found it.+

The attempt to use Mr. Sarony's picture of Oscar Wilde, however, by the Burrow-Giles Lithographic Company, has had more and better results. This Company copied Mr. Sarony's popular photograph in a lithograph, and Mr. Sarony obtained an injunction against the Company for infringing his copyright. The lithographers set up the double claim, first, that a photograph could not be copyrighted, and, next, that anyone was at liberty to make a picture of Oscar Wilde in knee-breeches.

The only important point, however, raised by the case was whether Congress had and has the constitutional right to protect photographs and negatives thereof by copyright. The court held, first, that there is no doubt that the Constitution is broad enough to cover an Act authorizing copyright of photographs, so far as they are representations or original intellectual conceptions of their authors; second, that the finding of facts shows that the photograph sued on in this case was an original work of art, which was the product of the plaintiff's intellectual invention, and of which the plaintiff was the author; and that it belonged to a class of inventions for which

was concerned by "the photographic method which," said Judge Blatchford, "more easily than any other, produces a perfect copy."

^{*} Drone on Copyright, p. 102.

^{† 5} Blatchford, C. C., 325.

^{; 5} Blatchford, C. C., 362.

^{*} R. S., 2d ed., 1878, p. 957, sec. 4952.

[†] Weekly Notes of Cases, 10, p. 403.

the Constitution intended that Congress should secure to him the exclusive right to use, publish, and sell, as it has done by Section 4952 of the Revised Statutes.

This establishes all a photographer like Mr. Sarony needs; but it leaves, as already pointed out, the copyright of photographs of a different order under some question, and subject to the future action of the courts.

A DISCUSSION ON PRICES.

(Continued from page 153.)

V.—To BE CONTINUED UNTIL THERE IS A REFORMATION.

THE answers from the audience say more for the cause this month, and say it better than we can. We are glad to see this interest, and shall have more to say in our next.

You will be blessed by the photographers of the higher class if you will continue to strive towards their getting better prices for their photographs. Portland has not escaped the fever, which some places have, to a greater extent, of cutting in prices, and offering the productions of their skill at barely living rates. I am not inclined to lower mine, nor will I, till bread and butter will not come to me unless I do; but as I see no such dire catastrophe pending, whatever, I do not concern myself much about the matter, except this one thing-if I am the only photographer in the State who gets fair prices, I shall stand alone in my isolation; for my tendency ever since I first went into the practice of photography has ever been to uphold the quality, and, as far as my own personal though feeble efforts were concerned, to raise photography to a higher standard, and not to depreciate it.

Such men as Gilbert & Bacon, Sarony, Mora, Rocher, Max Platz, Ryder, Taber, Gutekunst, etc., are the ideal men in our profession, and such I am pleased to call my friends—at least I am sincerely theirs. These parties all obtain good prices and enjoy a liberal trade. It may be well for some to say, "They can do so, for they are well up in their art." Certainly they are; and why is it they are well up? Is it because they charge living prices for their

work? Certainly not! It is because they love the art, and have no sympathy towards anything that has a tendency towards degrading it. They are our peers, to be sure, but what of that? If we love the art as thoroughly, and devote as much time, care, and study to it as they do, we can all uphold it, and wave the banner aloft, just as well as they can, and each in our little sphere or place in this fleeting world do as much good, perhaps, in many places as they can, because our heart is in it, and it has our sympathy and respect, and we are ever ready to do all we can to improve and elevate it. How can we expect the public to respect an art which we are ever ready to slash at, conveying to the public mind the idea that photography is machine work?

I am glad that you have raised this question, for I trust it will meet the support of thousands of our striving and enthusiastic brother-workers, who will rally around a flag to prevent this danger of war upon our love, as we would all rally to prevent the invasion of a dreaded and powerful foe, about to make war upon our nation. It may seem that I am rather rabid on the subject of prices, but when I hear how rates are cut in other cities, and see that the tendency is to do so here among some of my competitors, I cannot but see that the result is ruin financially to all who try it, and is, of course, disastrous in a measure upon the public mind towards the art I love.

In regard to my own prices, I will say that there are a dozen or so photographers in Portland who all enjoy a very good patronage, and as the place has only a population of about thirty-six thousand, it follows that there is only a small percentage of the people who are able to pay a very high price for photographs.

CHARLES W. HEARN.

PORTLAND, ME.

I claim that the public are not judges of the work, so much as they are judges of the man; therefore, let a photographer locate in a place, conduct himself properly, turn out nothing but good work, act honestly and honorably, and he can command the trade of the best class always and get fair prices; for those who want good work are willing to pay good prices, and want a reliable man to do that work, one whom they can trust—for they are not judges, and are willing to leave it to one in whom they have confidence. By good, honest work get the confidence of your patrons, and one-half is done.

L. C. OVERPECK.

HAMILTON, OHIO.

If we could have a thorough uprising of the whole fraternity by States, it would undoubtedly do much good; a little movement here and there does little good. A general movement along the whole line is what we want.

I would suggest that an organization be formed in every State; or, first, let there be formed a national committee to throw its whole efforts on some one State, and test the matter by appealing to the fraternity in the larger cities to organize. It is the large cities that control the price in the small ones. In many towns it is dog eat dog with the boys; in that case an outside committee might arrange matters. Again, they are often in harmony with each other, and work low prices because larger places near by compel them to, and would readily advance if others did in the surrounding towns.

Perhaps a little of my past experience may benefit some. About five years ago, the low prices in Rochester were often quoted to me, and some of my trade from the small railroad towns left me; fearing I would lose trade, I reduced my price from \$6 to \$4.50. This reduced price I kept for two years. By referring to my books, I found the reduced price increased my sittings from 80 to 100, with the following result: 80 sittings at \$6, \$480; 100 sittings on the reduced plan, \$450-\$30 less money, and 100 negatives instead of 80 to make and print from. As I had got down, I supposed it would be difficult to get back. I found customers just as troublesome to please, and they had just as much fault to find as with the high price. One day I resolved that the price would go up to the old rate-\$6-and up she went. Very few found any fault; about the same increase on the low price fell off with the higher

price. And I was well satisfied with the change, which I have kept for the past three years. If you find anything worthy of notice in these rambling thoughts, you are welcome to it.

F. B. CLENCH.

LOCKPORT, N. Y.

We have one price for every size photograph produced at our establishment, and stick to it, too; while in our city there are galleries which furnish cabinets, for instance, as low as \$2, \$2.50, and \$3 per dozen. In reference to the latter, you do not need to see them to know what they are.

I make quality of work the grand central objective point, and will not permit patrons to have pictures which to me are unsatisfactory. I make all sittings personally at my gallery, and exact of myself the production of negatives as near right as, under existing circumstances, I can make. We have all the work that seven, constantly busy, can produce, and the business is continually growing.

I wish you prosperity as a proper reward for your untiring efforts for the elevation of photography.

CHARLES T. STUART.

HARTFORD, CONN.

PERTAINING TO THE



CLINTON, IOWA, April 21, 1884.

MR. E. L. WILSON.

DEAR SIR: Through your magazine. I would like to ask the photographers of the Association if it would not be a good plan at our next Association meeting to have one or two sessions in the interest of practical photographers only, in which business, plans, and suggestions may be discussed

pertaining especially to their interests—financially and otherwise? The stock-dealers hold separate sessions and devise plans for their mutual protection and benefit, which is all perfectly right, and I would propose that we do the same.

To a certain extent, the interests of the manufacturer, stockdealer, and photographer are identical, but beyond a certain point they seem to see the expediency of guarding their interests separate from the photographer. Now I think there are issues which present themselves which ought to be looked after especially by the photographic fraternity. At any rate, I will venture to throw out the suggestion, and if thought worthy of attention, let us hear what the photographers think about it.

Yours, etc., J. H. REED.

ONWARD TO CINCINNATI!

THERE is nothing which so much entitles Cincinnati to be called a picturesque city as the striking beauty of her suburbs. Clifton and Burnt Woods are attractions which the fraternity should visit. Visitors to Clifton are permitted to drive through the various private grounds. The great summer attraction of Burnt Woods is the music given every Thursday afternoon, and the fraternity will have ample time to go there after the afternoon session. Visitors should not fail to visit Spring Grove Cemetery, unexcelled for extent, beauty, and improvement by any in the United States. In summer a more handsome and delightful spot cannot be well conceived. The Zoölogical Garden is one of the places of amusement which no comer to Cincinnati should fail to visit; there is no city in the United States which has so large and beautiful a garden, and so extensive and valuable collection of animals. Do not fail to have a collection of negatives made of these beautiful places, and keep them as pleasant recollections of your trip.

The fraternity have a special invitation from the Superintendent of the Young Men's Gymnasium, No. 102 Fourth Street, to visit this famous institution during their stay in the city. The following railroad companies have generously reduced the

rates to members of the Association who shall attend the Convention, namely: Chesapeake & Ohio; Cincinnati, Hamilton & Dayton; Cincinnati, Indianapolis, St. Louis & Chicago; Cincinnati, New Orleans & Texas Pacific; Cincinnati, Washington & Baltimore; Cleveland, Columbus, Cincinnati & Indianapolis; Kentucky Central; Louisville & Nashville; New York, Pennsylvania & Ohio; Ohio & Mississippi; Pittsburg, Cincinnati & St. Louis. Rates equivalent to two cents per mile each way. The companies will probably make one fare for the round trip. See June and July numbers of the journals, for exact rates. We will also notify all the stockdealers in the country the exact rates, and if the half-fare is adopted will send them certificates to distribute among the members.

Applications for space should be made at once to the Secretary, Mr. Leo. Weingartner, corner Sixth and Central Avenue, Cincinnati, Ohio. Make your applications early, stating the number of square feet required. There will be plenty of room for the display of photographs, backgrounds, and accessories; send them on. Stockdealers, manufacturers, and importers will never have a better opportunity for the display of their goods. In all cases freight must be prepaid; no attention will be paid to goods shipped otherwise. Every member is requested to send samples of his work, be it ever so small. The prizes offered by the dry-plate manufacturers should induce every member to do his best.

I have so much to say to the fraternity that I hardly know when to stop; but all I can say is that they will never regret that the Convention came to Cincinnati, and if all do not have a good time it will be their own fault. I have done my best to show them how to enjoy themselves.

LEO. WEINGARTNER, Secretary P. A. of A.

SOME SPLENDID WORK,

resulting from the tempting prizes offered by dry-plate manufacturers for superior productions, will be shown at Cincinnati. A prominent feature of the meeting will be the attractive exhibition. Since the aim of all is to improve upon the quality of their productions, if any way behind in that important point, or to hold their own, if in the front rank, a sharp strife may be expected. The exhibition of work is important as a spur and an educator. "Talk" has its value in describing processes and methods, where a single sentence of half a dozen words dropped upon the ear of an earnest worker will sometimes prove a key to the unravelment of mysteries. But "Work" speaks for itself—tells its own story, and carries conviction.

It is believed that the Cincinnati gathering will surpass all former ones. Secretary Weingartner is awake and pushing. The accommodations are all that could be desired, and nothing stands in the way of a large attendance and successful meeting.

Every member should make it a matter of pride and duty to be on hand with his exhibit. With the glorious success of last year at Milwaukee yet fresh in our minds, let us determine to outdo it at Cincinnati.

J. F. RYDER.

EDITOR PHILADELPHIA PHOTOGRAPHER.

SIR: Will you insert for, the fraternity the following:

RICHMOND, VA., April 12, 1884.

GEO. W. KIRK, Esq.,

Huntington, W. Va.

SIR: The Chesapeake & Ohio Railroad will make one fare for the round trip to Cincinnati for your Convention. Tickets can be obtained by communicating with either Frank Trigg, N. E. P. A. C. & O. R. R., 513 Pennsylvania Avenue, Washington, D. C., or with me at Richmond, Va. A reduced rate will also be made from New York via the Old Dominion Line Steamers by applying to H. W. Carr, G. E. A. C. & O. R. R., 339 Broadway, New York.

Yours truly,

II. W. FULLER, General Passenger Agent.

HUNTINGTON, W. VA.

PHOTOGRAPHS WITHOUT SILVER OR GOLD OR PAPER

would certainly be a novelty that most people would consider very wonderful, if not impossible. Yet pictures could be produced quite as easily without these materials as the Photographers' Association of America can be successfully run with the same essential elements lacking.

The Executive Committee and other officers are not the Association, and the members would feel unwilling to allow them the privilege of supplying the necessary funds. These officers would feel too puffed up with their importance if allowed to do all the work and furnish all the means for conducting the affairs of the Society. In this view of the case I would suggest that those photographers who have so far deferred the pleasure of paying their dues, and the manufacturers and dealers who have not yet subscribed, should embrace the earliest opportunity of getting their names recorded on the books of Treasurer Armstrong, and then nothing can possibly be lacking to make Cincinnati a grand success.

> J. H. KENT, President P. A. of A.

EXTRA BULLETIN.

Photographers' Convention, July 29, 1884.

TO THE FRATERNITY: As there are but a few short months before the Convention, it behooves all photographers to be up and doing to make it a success. The time has come for the fraternity to come together and unite as one person, cast all bickerings aside, and try to advance the art instead of lowering it. The question of prices has been agitated so often that it is hardly worth while to say any more on the subject; but there will be a time to come when the fraternity will have their eyes opened, and see that it is folly to reduce photographs to starvation prices. It is very easy to lower prices, but much harder to raise them again. The first Convention I ever attended was at Milwaukee, and I saw enough there to convince me that the work exhibited left me plenty of room to improve my own. made up my mind then that when I arrived home I would do so. So it is with all of us; there is plenty of room for improvement, and there is nothing that tends to improve a man's work so much as the studies offered at the Convention. Hoping that the fraternity will do their best, I re-Yours fraternally, main.

> LEO. WEINGARTNER, Secretary P. A. of A.

OUR PICTURE.

It is not often that we have the opportunity to present to our readers two pictures from such distinguished knights of the camera as Messrs. Van Loo and Landy, in quick succession. Moreover, it is quite as rare for us to be able to present such rare gems as that in our last issue and the one in this, from photographers both in the same city. We are able, however, to do this in making our selections for the twentyfirst year of our magazine life, and this month have great pleasure in accompanying our current number with a child-study, from the studio of Mr. Landy. We could, were it not for the fact that history does not always do well to repeat itself, go right on and repeat what we said for Mr. Van Loo last month, in commenting on Mr. Landy's splendid child-picture.

Anyone who enters the richly adorned studio and reception-rooms of Mr. Landy, will conclude very rapidly that Mr. Landy is certainly the child-photographer. We all remember his side-splitting and tearstarting pictures of babies called "Landy's Pets," several years ago. They gave Mr. Landy an international reputation, and since then it has been acknowledged that he is the chief of baby-takers. The moment a child looks into his bright, genial, and pleasant face its confidence is won; Mr. Landy is its friend, and in his very look seems to say to the child what the Arab says to his sweetheart when he desires to quiet her fears, "Be not afraid, I am as your father." Not only is this a fact, but in the pictures themselves we are compelled to say, when looking at the faces of these little ones, "Mr. Landy must love and understand children, or he never could secure such gems as these are." Not only are they gems as likenesses, but they are attractive as works of art. Mr. Landy possesses a most fertile genius for placing these little ones in cute and attractive positions. As a rule, he gives them something to do-causes them to represent some picture, or some little scene in home-life, or almost dramatic bit from the playroom and playground; so that we see not only photographic talent, but artistic genius, displayed in his work. They bear the individuality of Landy upon them just as plainly as in their physical make-up they bear the image of their parents. We have witnessed and wondered over Mr. Landy's treatment of children under his skylight, and to see not only how artistically he poses them, but how rapidly he makes their pictures. After the last baby of the day had been taken-a little time ago, when we visited him-he came to us as bright and genial as though the day was just beginning, and, rubbing his hands together, said, "It is a real pleasure to make the pictures of the little ones; they are so responsive, they help one so, and they inspire a man with the feeling and desire to do his best. Moreover, I feel that the price which I receive for my pictures enables me to take pains with the little ones, and to make myself sure of getting the best results possible. To do this, while the child is posed, I expose, sometimes, five or six plates, and out of them all I am sure to get a most natural result." This is the real secret of Mr. Landy's success: First, he understands his art; second, he insists upon being paid for it; and, third, being paid, takes pleasure and interest in his work. In olden time Sertorius, though in the height of his power in Spain, sent word to Metellus and Pompey that he was ready to lay down his arms and lead a private life if he were but allowed to return to his home in Rome, declaring that he would rather live as the meanest citizen than, exiled from it, be supreme commander of all other cities together. So it is with this photographic Sertorius; for more than once he has declared that he would rather spend his days at his camera, moulding and shaping the pleasure and comfort of the populace through his splendid art, than he would to be a commander of a great city. And it is just such a feeling as this that makes the true artist; and the more all of us can imbibe, and absorb, and make it a portion of ourselves, the better we shall succeed in anything that we undertake. Great success to the noble knights of our art who are able to give us such examples to study!

Our prints were made, as usual, at our own rooms, upon the Dresden paper imported for us by the well-known photographic merchant, Mr. G. Gennert.

Editor's Table.

PICTURES RECEIVED.—Mr. VAN Loo, of Toledo, Ohio, is one of the most enterprising and promising photographers of the West, full of feeling for his art, and well skilled in its manipulation. He favored us with a number of examples of his work. We have also examples of their work from Messrs. Stubbert, of New Sydney, and Frederick Mueller, of Owatonna, Minn. The latter gentleman sends us examples both of his wet and dry-plate work, and they prove him to be entitled to be called equal to the emergencies of both.

THAT NEW STORE.—SCOVILL MANUFACTURING Co. have just occupied their new store at 423 Broome Street, next door to their old locality. We shall presently describe it throughout. We suppose we shall have better *Times* than ever when all things are fixed. It is the grandest photographic stock establishment ever known in the world.

A New Firm at an Old Place.—The firm of Broadbent & Taylor, 912 and 914 Chestnut Street, Phila., has been dissolved; and the business is continued with all the old appurtenances at the same place by Messrs. Broadbent Bros., sons of the veteran whose name they bear.

RECENT WONDERS IN ELECTRICITY, ELECTRIC LIGHTS, ETC .- This is the title of a very interesting book edited by HENRY GREEN, Esq., and published by the New York Agency College of Electrical Engineering, 122 East Twenty-sixth Street, New York. The work consists of one hundred and sixty-eight pages, is the size of our magazine, beautifully illustrated by a number of fine engravings, and, as its title indicates, gives a most interesting list of descriptions of the various uses made of electricity. The author has proved himself too bright to omit a notice of photography, and has included in his excellent book a full description, illustrated, of Mr. Kurtz's method of photographing by electric light. The postal telegraph system, the telephone, electro-plating, electric lighting, electric motors, storage of electricity, the telegraph system, and the application of electricity to surgery, with many other departments, are all elaborately and plainly described. The work will become very popular, and it should be read

by every intelligent person. It is sent by mail, on receipt of two dollars, to any address.

ITEMS OF NEWS .- A stereopticon exhibition was given by the Cincinnati Amateur Photographic Club on Thursday evening, May 8th. We received a very prettily printed invitation to be present, but could not do so. The Bureau of Information for April, has been received from the publishers, Messrs. Douglass, Thompson & Co., Chicago. It is much enlarged, and looks better each time it makes its appearance. We have received a call from Mr. N. L. STEBBINS, of the Blair Tourograph Company, Boston. This company is doing a fine business. Prof. A. E. WILLIS, ex-photographer, gave a very pleasant physiognomical entertainment in New York recently. He is gaining fame in his new profession constantly. We have received a copy of the constitution of the Society of Amateur Photographers of New York. Thanks to the President, Mr. F. C. BEACH. Dr. CHARLES Formes delivered a lecture on dry-plate developers, before the Rochester Photographic Society on Monday evening, May 19th. A report of the lecture will be given next month. Mr. T. H. McCollin, 635 Arch Street, supplies a very superior article of draughtsman's sensitive paper for the Blue process. Send for sample.

MR. T. C. ROCHE.—A very happy incident occurred in New York on March 18th, when Mr. T. C. Roche, the veteran photographer and experimentalist, was given an ovation at Martinelli's by his employers, Messrs. E. & H. T. Anthony & Co., and invited guests. Not only was a sumptuous banquet set before the assemblage, but a presentation to Mr. Roche of a gold watch took place. No one more deserving than Mr. ROCHE could have been thus honored. An-THONY'S Bulletin for April devotes a good deal of its space to the report of this meeting, and the responses to the various toasts. Some of them were quite bright and humorous. One of them gives unmistakable evidence per se of the influence which the repast had upon the good humor of the gentleman who made the address. He evidently believes that variety is the spice of life, and has given us variety in his speech, if nothing else. We hope Mr. Roche may live a long while to follow the "new time," by which he must work hereafter.

THE CHEMICAL EFFECT OF THE SPECTRUM, BY DR. J. N. EDER.—This excellent work has been republished by the Scovill Manufacturing Company, New York, and will be found of great value to all thoughtful photographers and students in our art. The learned author has given us fourteen chapters of explanations of his experiments in the most practical shape possible. Only those who are accustomed to make up such works as these know of the immense amount of labor involved and how to appreciate it. No more valuable contribution to photographic literature has been given us for a long time than this splendid work of Dr. Eder.

THE AMATEUR PHOTOGRAPHER .-- A manual of photographic manipulation intended especially for beginners and amateurs, with suggestions as to the apparatus to purchase and the prices, by ELLERSLIE WALLACE, JR., M.D. Philadelphia: PORTER & COATES, Publishers. Price, \$2.00, bound in leather. This little gem of one hundred and seventy-four pages, from our old amateur friend, comes to us like a ray of light, so full of actinicism and photographic quality, that it is practically what the name of the author guarantees. He has long since been one of our most successful amateurs, and therefore his book tells in plainer language and more detail, than would be usually the case with the everyday worker, of what the amateur desires to know. After going over the old story with great care, he adds an appendix of over twenty pages. It is really the most valuable part of the work-a sort of a brief schedule of the different terms used in photography, and of hints and dodges useful in the practice of the amateur department. The book is embellished by a 4 x 5 specimen of amateur work of excellent quality. On page 25 the learned author declares his preference for English apparatus, but he illustrates his book with cuts from "Scovill's" American models!

Messrs. Buchanan, Smedley & Bromley, 25 N. Seventh Street, Philadelphia, have received a complete line of ebonized rubber developing-trays of a very superior quality, which they offer to the trade at low rates. A circular, giving list of sizes and prices, will be supplied on application. This new firm is pushing business with great vigor. Through some mistake of our own their advertisement was left out last month, but it will be found in place again, and will so continue. Do not judge of this house by the size of its advertisement. They have just received a new importation of albumen paper from abroad.

Messrs. Hodge & Huston, well known in Philadelphia, have established themselves at 25 N. Seventh Street, as solar and electric-light printers. A specialty is made of permanent platinotype enlargements. These can now be made about as cheap as silver prints, as all will learn if they send for size and prices to the gentlemen named above. We wish them success in their new enterprise.

P. A. of A.—Cincinnati now rings in the ears of all live photographers as does the music of the birds in the ears of the world at large. Everybody who is alive will go. Enthusiastic and urgent remarks are made on the subject by Messrs. Ryder, Kent, and Weingartner in proper place, and we can only add our mite in proper place, and they say. We hope to be present at the Convention as usual, and to see most of our subscribers there. Be sure to come.

THE AMATEUR QUESTION.—This subject is discussed on both sides in our current number. We are disposed to give a fair chance to everybody, and hope that everybody will act fairly. We have only to look at the work already done by some of our new societies, to convince us that more good than evil is to be expected from the amateur. We must not look at things narrowly, but sensibly.

Do not forget to read Mr. Sherman's excellent article on the "Works of the Great Masters." Mr. Sherman is a veteran in our art, and a veteran artist as well, thoroughly understanding art-history and practice. What he says is well worth reading. He is devoting his time to the reproduction of the works of the old masters, and a catalogue of his splendid photographs may be had by sending to him, William H. Sherman, 455 Jackson St., Milwaukee, Wis.

Dr. Vogel's New Discovery.—What a wonderfully industrious experimentalist is our friend, Dr. Vogel, of Berlin. All who read his communication on the first page of our current issue must be impressed with this fact. Great strides in photographic accomplishments will be based upon the Doctor's discoveries, and we are glad to know that his research and industry are to be rewarded by the Society of which he is the honored head. This is the way things should be. We know that Dr. Vogel has done much good work for science with very little remuneration to himself, even sufficiently to pay him for the time and labor expended, to say nothing about anything further. He is very

free and full in his instructions this month, and we hope the subject will be taken and made profitable to all our readers.

MR. J. LANDY, of Cincinnati, will have to be considered the historical photographer. He has sent us a series of photographs illustrating the destructive propensities of the mob at the court house in his city, a few weeks ago. They are excellent pictures, and well chosen to display that reign of terror.

Now Ready for Delivery.—Picture-Making by Photography, by Mr. H. P. Robinson. New York: Scoull Manufacturing Company, Publishers. Price, paper cover, 75 cents; cloth, \$1.00. A most excellent book for the outdoor worker.

MAILING PHOTOGRAPHS.—All sorts of contrivances have been devised for mailing photographs. As a rule, they reach their destination badly broken up and spoiled. The use of the patent wooden mailing-box of the H. C. Underwood Company will avoid all this. We have seen them and like them. See advertisement.

Genelli & Tonndorff, of St. Louis, are making the best stamps we ever saw, for the trade, at $37\frac{1}{2}$ to 75 cents per one hundred, according to quantity, and how they can do it at a profit is an enigma. They have patents pending on the only camera ever made which will make thirty-five perfect negatives at one exposure on a 5 x 8 plate. Their stamp trade is over 10,000 per day. They have also copyrighted a beautiful stamp album.

H. Baden Pritchard Dead.—With extreme regret, just as we close our current issue, we learn of the death of our long-time colaborer and friend, H. Baden Pritchard, editor of the London *Photographic News.* His decease occurred on Sunday evening, May 11th, of pneumonia. Our art has met a sad loss in this untimely death. A sketch of Mr. Pritchard's life and work will appear in our next.

DRY-PLATE CHANGES.—Mr. H. NORDEN, unable to maintain himself at the low prices at which he supplied his plates, has disposed of his works to the St. LOUIS DRY-PLATE COMPANY, which will continue the business at the old stand, 827 Chouteau Avenue, with Mr. Norden as an employé. The desire of the new company is to transact their business wholly through the dealers. Mr. Norden's case should be a warning. Glass and emulsion do not represent the cost of dry plates by any means. Many other

items enter into their cost. We hope more wisdom and good advertising will ensure better success for the new establishment.

The secret-process monger is on the war-path again. This time he springeth from Boston, "Office of the Everett Studios." He offereth how to make your own plates, a la emulsion, for \$10 and giveth (in lieu of a chromo) the "new developer, best in the world." The "form of agreement" is unique. Beware. More soon.

THE NORTH AMERICAN PHOTOGRAPHIC PUBLISHING COMPANY, of Buffalo, N. Y., are sending out circulars with offers to photographers, which those who receive will understand. We are proceeding with an investigation of this concern as to its motives and so on, and hope to report in our next issue.

THE New Haven Apparatus Factory, also owned by the Scovill Manufacturing Company, is where the grade of apparatus known as the "Standard" is made. A large business is being done here, as heretofore, and is somewhat increased by the fire at the American Optical Company's Works.

THE AMERICAN OPTICAL COMPANY'S FACTORY.

We are glad to know that this great necessity in our art has now, phenix-like, risen from its ashes, and that its proprietors are better able than ever before to meet the wants of its patrons. A splendid new factory with five floors, fifty by one hundred feet each, is in full blast, and the AMERICAN OPTICAL COMPANY is in shape to turn out apparatus better, quicker, and more of it than ever before. Long may it continue so to do.

Mr. John Barnett, 107 4th Avenue, New York, offers a new dry-plate holder with fine recommendations. Mr. E. T. Whitney whose name is so familiar to our readers, has the retail department under his charge. Send for a circular.

For Sale.—One of the best galleries in the Northwest. Dallmeyer lenses; Seavey's grounds; best location, and doing first-class trade. For particulars and price, address with stamp,

Fredericks & Koester, 16 E. Third St., St. Paul, Minn.

GELATINE AGENCIES.—SCOVILL MANUFACTURING COMPANY, of New York, have been made trade-agents for the sale of the gelatine products of Mr. Charles W. Heinrich, and of Messis. Nelson, Bell. & Co.

Specialties.

MAKE OUT YOUR OWN BILL, and remit cash with your advertisements, or they will not be inserted.

ADVERTISING RATES FOR SPECIALTIES.—Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. So We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement. Postage-stamps taken.

NOTICE OF REMOVAL.

Since May 1, 1884, our address is at new quarters,

216 East 9th St., New York.

At the same date the Chicago Office will be discontinued.

LAFAYETTE W. SEAVEY.

W. F. ASHE,

A BIT

ACCESSORIES,

REMOVED TO 68 WEST FOURTH ST.,

4 BLOCKS WEST OF BROADWAY, N. Y.

My new studio is fitted up with all the modern improvements, and the most refined demands from a critical public can be satisfied. A visit to my establishment, which has the largest showroom, containing the greatest amount of stock of any place in the world, will be gratefully appreciated.

I have again added numerous new designs to my great variety of patterns for backgrounds and accessories, and keep also in stock a large quantity of goods for parties to select from, saving time and delay on orders.

FOR SALE IN THE BEST MINING CAMP IN AMERICA.—I have just received into my hands a good photographic outfit and full stock, which must be sold immediately. For particulars,

Address J. H. EARDLEY,

Grocer, Butte City,
Montana Ty.

ROCKWOOD SOLAR PRINTING CO.

17 Union Square, New York.

TIME.—It is our intention that every order received in the morning's mail (when not to be put on stretchers) shall leave this establishment the same day or the following morning. If too late for the morning work, it is sent on the second day. Having our own engine and electric light, we are not at all dependent on the weather.

GEORGE H. ROCKWOOD,

Business Manager.

The Photographic Mosaics for 1884 is nearly all gone. Like its predecessors, it contains articles of interest to all persons connected with the art of photography. The introductory article by Edward L. Wilson is teeming with useful information, and should be read to be appreciated. As there is but a limited number of copies printed, those who wish to have a useful as well as ornamental work for their studios, should avail themselves by sending in their orders as quickly as possible. Nearly all gone.

FOR SALE.—Being obliged, on account of health to remove to a different climate, I will sell my gallery, either complete, or only stock, fixtures, show-cases, negatives, etc., to a first-class workman. Gallery is one of the best equipped in the State of Ohio, and clearing \$2000 per year.

Address

O. M. PAUSCH,

No. 18. WAYMOUTH'S VIGNETTE DADERS

PAPERS, No. 18.

The old form of No. 18, Waymouth's Vignette Papers, oval, has been discarded, and a new pear-shaped style is now ready in its place. It is a beautiful piece of gradation and prints perfectly. Price \$1.25 per dozen. For sale by all dealers. See advertisement for all sizes.

No. 18. NOW READY. NO. 18.

S. G. NIXON,

PORTRAIT ARTIST,

No. 813 Arch Street, Philadelphia, Pa. CRAYON AND WATER COLOR PORTRAITS.

Solar prints and photographic enlargements furnished and finished in crayon, Indian ink, or water-colors. Photographic coloring on plain or albumenized paper and porcelain. Copies finsihed in Indian ink and water colors.

References and terms on application.



WILSON'S PHOTOGRAPHICS

Holds up to view all about manipulation, photographic art, posing, lighting, etc. Nearly 1000 sold. See advertisements and testimonials.

84.00

\$4.00

ADDRESS T. W. POWER, N. Y., Secretary of Association of Operative Photographers of New York City, for operators, printers, and retouchers, 392 Bowery, or 487 Eighth Avenue. 1864

M. WERNER,

PORTRAIT ARTIST,

No. 102 N. TENTH STREET, PHILADELPHIA.

Photographs finished in crayon, India in water colors, and pastel, in all sizes, in the verbest styles, and at moderate prices.

Solar Prints and Enlargements Furnished.

EVERY photographer in want of exceller lenses, for any purpose, will best serve his interest by consulting the new illustrated price-list Messrs. Benjamin French & Co. before purchasing.

NOTICE OF REMOVAL.—Mrs. Clarke, Artist, la of 561 Druid Hill Avenue, Baltimore, begs inform her friends and the photographic pr fession that she has removed to 2104 North 20 St., Philadelphia, Pa., where she will be happy receive any commission for water-color paintin Terms, etc., on application to Mrs. Clarke, or the office of the Philadelphia Photographer.

FIRST-CLASS operator wanted. One who is gentleman, skilled, and of good habits. Perm nent situation. Address C. D. Mosher, 125 State St., Chicago, I

Wanted.—A first-class retoucher, printer, ar finisher. None other need apply. To such, goo wages, a permanent situation, and railroad fa will be given. Address Mullett Bros.,

Photographic Stockdealers, Kansas City, M

DISSOLUTION.

ROCHESTER, May 3, 1884.

The partnership heretofore existing betwee the undersigned at the City of Rochester, N. Y under the firm name of Inglis & Reid, for the manufacture and sale of gelatine dry plates, this day dissolved by mutual consent. The affairs of the firm will be adjusted by Jame Inglis, who has purchased the entire rightitle, and interest of William H. Reid, and whe will continue the business under the title James Inglis. All liabilities of the old concern will be paid, and all accounts due collecter by the new proprietor. James Inglis, [L.S.]

By a photographic printer; single man. Wi assist at operating. Experienced. Reference Address N. R. Potts, Philadelphia, Pa.

1884

PORTRAITS IN CRAYON.

The new book by E. Long, on the art of making portraits in crayon on solar enlargements, covers the entire ground, and is sold for the low price of fifty cents. For sale by

EDWARD L. WILSON,
Philadelphia.

METAL GUIDES

FOR.

A. M. COLLINS, SON & CO.'S

No. 26 GILT BEVELLED-EDGE CARDS.

The fancy-shaped mounts now so fashionable among photographers, require metal guides with which to cut the photographs. They are now kept on hand, and can be supplied in the following shapes, and at the prices mentioned:

Cross	\$1 05
Star	1 00
Palette	
Leaf	90
Bell	90
Crescent	80
Egg	60
Friangle	
For salaby Enwine I Wilso	

For sale by EDWARD L. WILSON,
914 Chestnut Street,
Philadelphia, Pa.

THE genial well-known photographer, Mr. C. H. A. Tonndorff, has presented the public with a novelty in the photographic line. He alls his new invention Stamp Portraits. They are issued in sheets, gummed on the back and perforated like postage-stamps. Each sheet conains one hundred of these little gems. Their elegance and neatness, combined with their heapness, will insure their popularity and crete a demand for them. It will not be long beore business cards and invitations will be dorned with these stamp pictures. John A. Sholten has, indeed, made use of them in decrating the programmes used at the Olympic Theatre and the Opera House, with excellent ortraits of Mr. Irving, Miss Terry, and Maggie Mitchell. These pictures received the highest praise from all who received them. -St. Louis Hobe Democrat.

Wanted.—A first-class dry-plate maker by he 15th inst. To one who can take full charge, will pay good salary, or will give him an inerest. No capital required. Address

> Business, Care Wilson, Hood & Co., Phila.

Wanted.—A first-class operator. One who has been head operator in leading gallery of some city. Address Genelli,

St. Louis, Mo.

DR. VOGEL'S "PROGRESS."

PREFACE TO THE AMERICAN EDITION.

No apology is needed for the issue of another work by Dr. Vogel. For nearly twenty years he has contributed largely to the knowledge of American photographers by means of his monthly correspondence in the *Philadelphia Photographer*, and three editions of his excellent *Handbook*. Therefore a warm welcome is confidently expected for this new contribution to our literature.

By his own request, I have revised and "Americanized" it as much as it would bear without damage, and have added from his correspondence such items of progress as have appeared since the issue of the German edition.

Dr. Wallace has given us an excellent translation, exercising as he has, the most conscientious care throughout.

I commend the work to the craft with a knowledge of what it contains, and trust it will prove as useful as I anticipate.

EDWARD L. WILSON. PHILADELPHIA, July 15, 1883.

THIRTY-FOUR YEARS IN THE HARNESS ought to entitle a person to the freedom of his country. During these years I have had my share of the glory, and laid by a sufficient competency for old age, and will sell my gallery cheap for cash, and retire from business. To any person who wants to buy, there is no gallery offered with such inducements as I will give.

Address

C. D. MOSHER, Artistic Photographer, 125 State Street, Chicago, Ill.

Wanted.—By an artist in water-color, Indiaink, and crayon, a position with a photographer for the summer months. Coast of Maine preferred. Address Alice Hart,

117 Berkeley St., Boston, Mass.

J. N. BRENGEL,

SOLAR PRINTER.

Photo Enlargements by Electric Light.

PRINTS MADE RAIN OR SHINE.

ADDRESS FOR PRICE-LIST.

No. 55 East Thirteenth St., New York



WILSON'S PHOTOGRAPHICS Teaches every step in Photography.

\$4.00 To any Address. \$4.00

Wanted.—A single young man as operator—wet and dry plate—and to make sittings, and also able to take charge if necessary. A reliable, steady, and courteous person may hear of a steady position, provided as above, by addressing

M. E.,

eare E. L. Wilson, 912 & 914 Chestnut St., Phila.

A TESTIMONIAL.

WASHINGTON, May 21, 1884.

JOHN CARBUTT, ESO.

DEAR SIR: I made some splendid drop-shutter views on your "specials," of the wheelmen, yesterday. Never missed one out of twenty, by J. A. Cole and myself. Tried two of ——'s specials—both nix. We say "Hurrah for the Carbutt Specials." There is nothing to compare with them. ——'s, ——'s, and ——'s all failed on the trial yesterday but yours, which were used by one other party, who made excellent views.

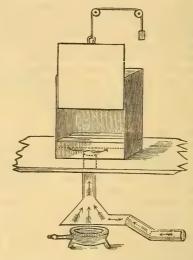
Yours truly, E. R. KNIGHT,

For Sale.—Splendid gallery: north light. Population 7000. Reasons for selling, am obliged to change, so will sell with or without instruments. Price, from \$400 to \$600. Terms easy. If not sold by June 20th, will hire a good operator to take entire charge.

Address

J. N. CHAMBERLAIN,

Webster, Mass.



WILSON'S PHOTOGRAPHICS.

All about emulsion work and plate making—a whole big chapter. See index.

\$4.00

Buy it.

\$4.00

THE German Photographic Society of New will receive correspondence of employers as well as employés, for help or situations.

THE PLATINOTYPE PROCESS.

NOTICE!

Thomas H. McCollin, of Philadelphia, is no longer agent for the sale of

WILLIS'S PLATINOTYPE PROCESS.

Licensees, both amateur and professional, and all who are interested in the process, will please address all orders and communications to Willis & Clements, proprietors of the patents, or to Buchanan, Smedley & Bromley the only authorized general agents for the sale of materials in the United States, 25 North Seventh St., Philadelphia, Pa.

PRINTING FOR AMATEURS BY THE

PLATINOTYPE PROCESS.

Instructions given in developing negatives, intensification of negatives, platinotype printing, etc. Printing price-list on application to WILLIS & CLEMENTS,

25 N. Seventh St., Philadelphia. Pa.

SITUATIONS WANTED.

No charge for advertisements under this head; limited to four lines. Inserted once only, unless by request.

By a young married man, as operator under light or outdoor, wet or dry plates. Has been in the business eight years. Will work on trial. Address Gus. Theilkuhl, 15 Fourth Street, S. E., Washington, D. C.

By an No. 1 retoucher. At present with one of the best establishments in New York, but wants a change of air. Address E. R., care Dawson, 317 E. Eighty-fifth St., New York City.

As a first-class printer, toner, and operator, also a good retoucher. Address Elmer Smith, Box 275, Meadville, Pa.

By a first-class printer, to take charge of a printing-room. Address W. T. Blanchard, Box 766, Middleburg, Vt.

By a foreigner, who speaks German and French, in some town in the South. Negative and positive retoucher. Address Bram, 61 Bond Street, New York City.

As operator. Has had large experience. Has lately discovered a method for making gray-tinted dry-plate negatives; quick printer. Address W. H. C., Box 356, Altoona, Pa.



J. L. CLARK, GOLD AND SILVER REFINER,

ASSAYER AND SWEEP-SMELTER, REMOVED TO

823 Filbert St., Philadelphia, Pa.

RETURNS MADE IN STRICTLY PURE CHEMICALS

REFERS TO, BY PERMISSION:

JOHN CARBUTT, Dry Plate Manufacturer, Philada.

WM. H. RHOADS, Photographer and Artist, Philada.

GILBERT & BACON, Photographers and Artists, Philada.

WM. H. CLIFFORD, Photographer and Artist, Philada.

ALBERT MOORE THE SOLAR ENLARGER, THE LONGEST, LARGEST, AND BEST. 828 Wood Street, Philadelphia.

SEND YOUR ORDERS FOR

PHOTOGRAPHIC AND PLATINOTYPE SUPPLIES

Buchanan, Smedley & Bromley,

No. 25 North Seventh St., Philadelphia.

NEW GOODS.

CAREFUL PACKING.

PROMPT SHIPMENTS.

WILSON'S LANTERN JOURNEYS

These descriptions should be in the hands of every Lantern Exhibitor and Lecturer. They help you choose slides. They tell you what facts and figures the public want to know about the places and things you exhibit. The contents are divided into JOURNEYS or selections as per list below:

DESCRIBES SLIDES ALL OVER THE WORLD.

DESCRIBES SLIDES ALL OVER THE WORLD

3 VOLUMES.

3 VOLUMES.

VOLUME I. 306 PAGES.

Contains NINE Journeys:

A-France and Switzerland.

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 Sweden, Russia, and Spain.
 E—Egypt, Palestine, Syria, Turkey,

F—Egypt, Palestine, Syria, Turkey,
Greece, and India.
F—England, Scotland, and United
States of America.
G—Centennial Exhibition, Philada.

H-Centennial Exhibition, Philada. I—The Paris Exposition, 1878.

IN ALL, OVER 900 SUBJECTS.

PRICE \$2, POST-PAID.

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Contains TWELVE Journeys:

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M-Spain and Portugal.

N-Switzerland-The Four Alpine Routes.

O-Italy, Ischia, and Sicily.

P—Turkey, Greece, and Egypt. Q-Palestine and India.

R-Scotland-Cities and Ruins. S-Ireland.

T-England-Cities, Museums, and Ruins.

U-United States of America.

IN ALL, 1073 SUBJECTS.

PRICE \$2, POST-PAID.

VOLUME III-ON THE ORIENT-NOW READY. PRICE \$2, POST-PAID.

Gives descriptions of alt the slides made by Mr. Edward L. Wilson of his personally taken views of The Sinai Peninsula; The Desert of the Exodus; The Route of the Israelites to the Promised Land; and

THE TAKING OF PETRA.

For Sale by All Dealers. EDWARD L. WILSON, Photo. Publisher, Philadelphia, Pa.

SEND FIFTEEN CENTS FOR NEW CATALOGUE.



SPECIAL



PORTRAIT.

This brand is prepared from a new and special formula that secures the extreme of rapidity and perfect uniformity one batch with another, and that makes them especially suited for Portrait and Instantaneous Photography.

FURTHER IMPROVEMENTS IN GELATINE PLATES.

We desire to call the attention of all interested in Photography to our Improved Brands of "A" and "B" GELATINO-ALBUMEN PLATES, that for the use they are intended for we challenge the world to produce their superior.

(A) (B) THE "A" GELATINO-ALBUMEN PLATES are for slow exposures on Landscapes, Buildings, Reproduction of Negatives and large Transparencies, and on thin crystal glass 3¼ x 4, for Lantern Slides.

THE "B" GELATINO-ALBUMEN PLATES are for rapid Landscape, Architecture, Machinery, and General Photography, yielding negatives of the highest quality and with a brilliancy equal to the best wet-plate work. The "A" and "B" brands can be worked in plenty of orange-colored light.

Carbutt's "Multum in Parvo" Lantern, with new improvements. Universally acknowledged the most perfect Dry Plate Lantern made.

Carbutt's Ruby Paper, a most perfect medium for the dark-room. Price, 25 cents per sheet. Size, 20 x 25.

Carbutt's Keystone Varnish, for Gelatine Negatives. 8 ounce bottle, 50 cents; quart, \$1.75.

FOR SALE BY ALL DEALERS IN PHOTO. MATERIALS.

PRICE LISTS FORWARDED ON APPLICATION.

JOHN CARBUTT, Keystone Dry-Plate Factory, Philada.

SCOVILL MANUFACTURING CO., N. Y., General Agents.

\$500 IN PRIZES

TO BE AWARDED

AT THE COMING

CINCINNATI CONVENTION

FOR THE

BEST WORK PRODUCED ON THE

INGLIS DRY PLATE.

PRIZES AS FOLLOWS:

For the FINEST collection of THREE OR MORE Photographs, framed, made on a 14×17 , or larger, INGLIS PLATE.

Cash, \$100. Also a Gold Medal, value, \$50.

For the SECOND BEST collection of THREE OR MORE Photographs, framed, made on a 14 x 17, or larger INGLIS PLATE.

Cash, \$75. Also a Gold Medal, value, \$25.

For the FINEST collection of Cabinets, 8 x 10, and others, in frame, 4 x 6 feet, made on INGLIS PLATE.

Cash, \$100. Also a Gold Medal, value, \$50.

For the SECOND BEST collection of Cabinets, 8×10 , and others, in frame, 4×6 feet, made on INGLIS PLATE.

Cash, \$75. Also a Gold Medal, value, \$25.

GRAND TOTAL, \$500.

The above is a bona fide offer. The committee of award will consist of five disinterested gentlemen, appointed at the Convention. At the close of the Convention, the exhibits which are awarded the prizes, as also the negatives from which the prints were made, shall become the property of Inglis & Reid, the frames to be purchased by them at cost price.

All competitors for the above prizes will be required to enter their names with us

on or before July 1st, on which date the entries will close.

The INGLIS PLATE is for sale by all stockdealers, or a sample dozen of any size, for trial, will be forwarded by the manufacturers on receipt of price, provided, it is agreed, that our formula for developer shall be used and our instructions followed to the letter.

JAMES INGLIS, Rochester, N. Y.

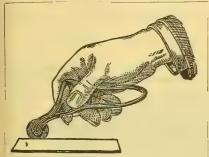
720 (5 gross) of these trimmers were sold to one party in July.

ROBINSON'S NEW MODEL

This drawing is of the full natural size and shape of New Model Revolving Trimmer. but size, varying ot

the aperture.

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$2\frac{1}{8} \times 3\frac{1}{4}$	$3\frac{9}{2} \times 4\frac{9}{8}$	$5\frac{1}{2} \times 7\frac{1}{2}$	7×9	$2\frac{1}{8} \times 3\frac{1}{8}$	$2\frac{3}{4} \times 4\frac{1}{4}$	$3\frac{7}{8} \times 5\frac{1}{4}$	$3\frac{7}{8} \times 6$				
$2\frac{3}{8} \times 3\frac{3}{8}$	$3\frac{5}{8} \times 5\frac{1}{8}$	$5\frac{5}{8} \times 7\frac{5}{8}$	$7\frac{1}{4} \times 9\frac{1}{4}$	$2\frac{5}{16} \times 3\frac{15}{16}$	FOR STERE	OGRAPH	4 x 6 g				
25 x 35	$4 \times 5\frac{3}{8}$	$5\frac{3}{4} \times 7\frac{3}{4}$	$7\frac{1}{2} \times 9\frac{1}{2}$	Arch Top	s. Round	Cornered.	Round.				
$2\frac{7}{8} \times 4\frac{1}{4}$	$4\frac{3}{8} \times 6\frac{3}{8}$	6 x 8	$7\frac{3}{4} \times 9\frac{3}{4}$	$3\frac{1}{16} \times 3\frac{3}{4}$, 3	3×3 $3 \times 3 $	$3_4^3, 3x3$	3 x 3				

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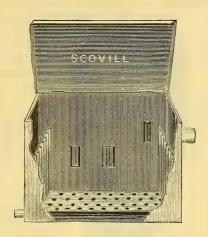
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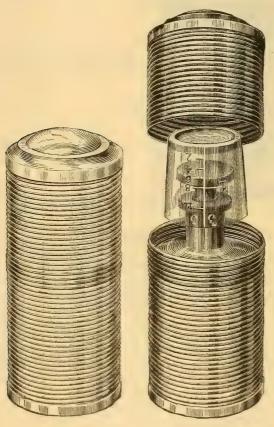
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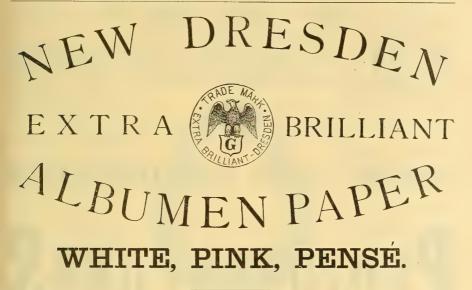
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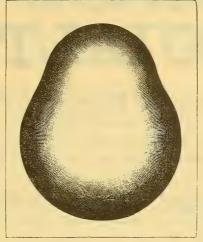
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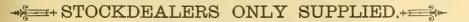
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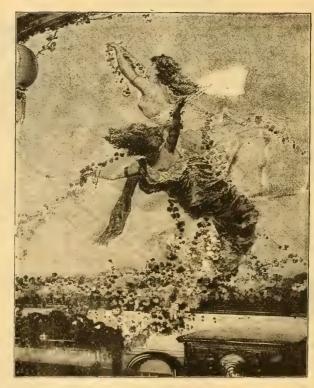
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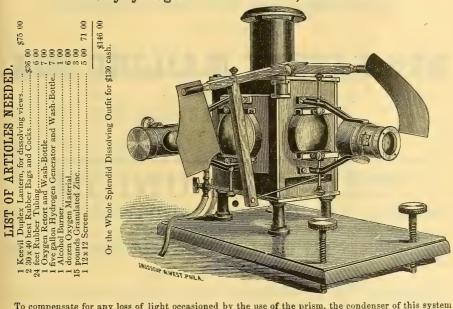
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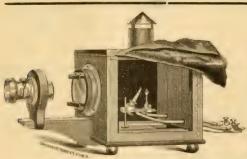
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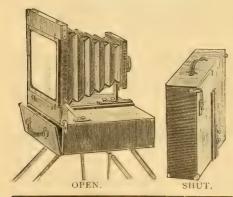
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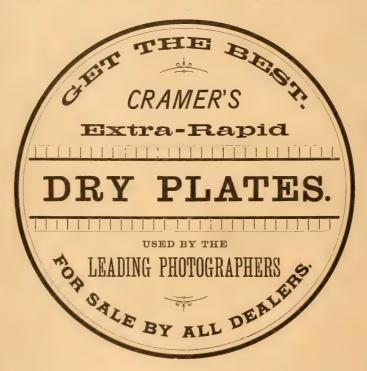
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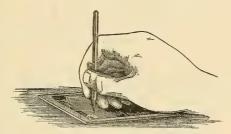
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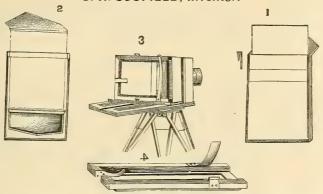
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attachment to camera.

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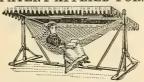
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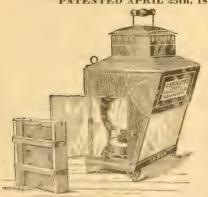
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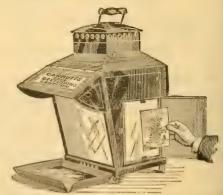
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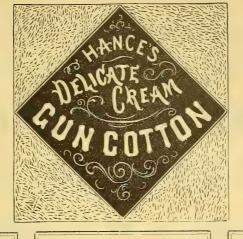
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GRETCHEN

Philadelphia Photographer.

EDITED BY EDWARD L. WILSON.

Vol. XXI.

JULY, 1884.

No. 247.

OUR REMOVAL.

QUICKLY, noiselessly, like the Arabs, we have folded our tents, and removed from our old quarters at 912 and 914 Chestnut Street to 1125 Chestnut Street.

The rooms we now occupy were formerly occupied by a photographer, and Janentzky & Co., the art dealers are underneath—all the better.

With better quarters it will be our endeavor to produce therefrom a better magazine. Please direct your letters accordingly, and come and see us.

OBITUARY.

HENRY BADEN PRITCHARD.

As briefly announced in our last issue, Mr. Henry Baden Pritchard, the Editor of the *Photographic News*, died suddenly on Sunday evening, May 11th, of pneumonia, at his home in London. Mr. Pritchard was one of the most talented of the little circle which comprises the editors of photographic magazines. Not only was he talented, but, as we know from personal acquaintance with him, he was pleasant in his life, a warm friend, and a genial companion. Mr. Pritchard was born in November, 1841, and at the age of twenty entered the Royal Arsenal at Woolwich,

and there remained until his death, as Chief Director of the Photographic Department. He was a member of all the photographic societies abroad, of the Council of several, honorary secretary of one, and treasurer of the Photographers' Benevolent Association. He was also a member of several literary and art clubs. He numbered among his companions some of the most distinguished artists and literary men of his day. He was himself an author of no mean repute, and was quite distinguished as a romancist. He was very fond of travelling, roaming about in curious places among curious people, and embodied the notes of his travels in his romances. We have a large number of these books in our library, the gift of the distinguished author. When last in London we spent an evening with him at his club, dined with him alone, and afterwards was with him until near midnight, discussing photography in our several countries, and planning for our future work in its behalf. Mr. Pritchard was in sincere sympathy with the working photographer. He was entirely practical, and was ever ready with a generous heart and an open hand to advise and assist those who needed such help. We shall remember our contact with him with great pleasure, and join with his many friends in sorrowing at his untimely end. He was followed to the grave by a large circle of acquaintances, from whose faces it could be seen that they

came not from idle curiosity, but out of sincere respect for the one who had gone before. Through the kindness of The British Journal we have obtained a very excellent portrait of Mr. Pritchard, a reduction of which will be found on the first page of our cover this month. It is from a negative by Chevalier Lafosse, of Manchester. While it is quite excellent, it does not give the bright and genial expression which we rememember our friend to have had. His death will cause a great void in photographic circles-a void which will not easily be filled. Personally we regret the loss of the pleasure which we had in his companionship and correspondence, and feel that our little photo-editorial circle is broken beyond repair. Our number is too few to spare such men as Mr. Pritchard without feeling the wound deeply.

THE DEVELOPER AGAIN.

So much has been written about developers, that the subject is monotonous to the casual reader, but I venture this on a point that I never saw in print:

I am enabled to develop out more detail on my interior exposures, and with less time, by using the ferrous oxalate developer, substituting the double salt of iron and ammonia in place of the sulphate of iron. Try it

W. L. SHOEMAKER.

THE SUMMER SCHOOL OF PHOTOGRAPHY.

Prof. Charles F. Himes, Conductor of the Summer School of Photography at Mountain Lake Park, Maryland, made us a visit recently, and left with us the following list of regulations for the School of Photography:

REGULATIONS FOR THE SCHOOL OF PHOTOGRAPHY.

The details of the conduct of the School will be under control of the Director in accordance with the following general regulations:

The School will be open on same conditions to ladies and gentlemen.

Formal application for admission to any of the courses may be made at any time to the Secretary of the Park Association, J. M. Davis, Esq., Oakland, Garrett Co., Md., but simple notice of intention to participate will be received after the 1st of July and placed on file; and should the applications in any course at the opening of the School exceed the limit of accommodations, preference will be given to those taking three of the practical courses, and in order of notification, provided formal application be made on or before July 31st, the day preceding the opening of the School.

No applicant will be enrolled by the Director in any class, except upon exhibition of the receipt of the Secretary of Mountain Lake Park Association for the fees in the

Students admitted after the opening of the School will be assigned to classes and sections already formed, and will have no claim for the repetition of instruction already given.

The students pursuing any course will be regarded as a class for purposes of instruction, but classes may be divided at any time by the Director into sections for practice.

The time of the School will be apportioned as equitably as possible among the different classes and sections, according to the character of the work, and the numbers in each, and the hours for instruction and practice of the classes will be arranged accordingly by the Director, and announced as soon after the opening of the School as practicable, subject to change by the Director at any time as the interest of the School may require, and students will be expected to conform to hours so announced, but exceptions may be made from time to time in individual cases for time of practice, for satisfactory reasons.

Students will be expected to practise in accordance with the suggestions of the Director as to time, places, subjects, etc., and cameras and all apparatus and material, or supplies for use, are to be used as directed in each case, and not to be taken beyond the limits prescribed, but cameras for dry plates may be used anywhere by special permission of the Director in each case.

All ordinary wear of apparatus and use

of material will be included in the fee for each course, but any damage or loss arising from gross carelessness or negligence will be charged to the student occasioning it.

Students desiring to purchase additional material and apparatus must make timely application to insure a prompt supply.

Students having cameras of their own will not be restricted in their use, and will as far as possible, without interfering with the regular work of the School, be granted facilities for additional practice with them.

Exchange of work among students will be allowed, but not sales by students.

By sending to Prof. Himes, Dickinson College, Carlisle, Penna., a full list of the course of studies and the terms for instruction may be had. Items of Information are above. Let us say, in addition, that we believe this "Summer School" will be a grand success, for the reason not only that photography is now a popular source of entertainment and diversion, but because of the talent of the gentleman whose name stands at the head as conductor. Himes was one of our very first amateurs and contributors to photographic knowledge. To him we all owe much for his discoveries and suggestions; and, since he has never lost his enthusiasm for our art, we are sure that this new undertaking of his will be a grand success, as is everything else he undertakes is. We look for a great deal of good to grow out of these schools of photography which are sure to follow in large number after Prof. Himes has established the fact that they are possible. is none too soon to engage a scholarship under his guidance and care, when recreation and knowledge can be enjoyed at she same time.

THE TRUE STORY OF THE BALTI-MORE PRICE WAR.

As some false and malicious accounts have lately been circulated (and we understand more are about to be, in pamphlet form) by interested parties, who are trying to shift the responsibility and disgrace from their shoulders to that of the honorable portion of the fraternity here, I

have been requested, by several of the leading photographers, to have a concise and true account of the matter published. This is especially important, on account of the coming convention, where the matter may again come up; and, though your journal has contained true accounts from the beginning, commencing with the January number of 1882, yet the memories of photographers are short; and a concise history supported by the evidence of the craft, will enable our brethren throughout the country, to judge us fairly. Up to November, 1881, there had been no advertised cutting of rates in this city, in spite of the raid of the "cheap John" on Richmond and Washington, and business generally had a prosperous outlook. The following were the prevailing prices: The leading galleries were getting eight and nine dollars per dozen for cabinets, while the general average were charging five and six dollars; no one but two or three very small and obscure establishments getting less than four dollars. Only one who did a fair business (at the eastern end of the city) worked that low; this, however, not being advertised.

There was only one exception to this rule among the larger establishments. A former employé of R. Walzl has in his possession, club tickets issued previous to the time mentioned, by which, as well as other evidences, it is proved that card pictures were made for one dollar and twentyfive cents and one dollar and fifty cents per dozen, and cabinets for three dollars, at Walzl's establishment; but, not being advertised much, did not do the harm that his later movement entailed on the craft. Early in November, 1881, six months after having removed to the largest and most expensive studio in the city, R. Walzl suddenly announced, in flaming advertisements, cabinets by the "instantaneous" process, at three dollars per dozen, resulting in a regular rush to the place on the part of the public. Let it be said, to the credit of the honest photographers of Baltimore, that, poor as many of them were, it was reserved for the wealthiest one among them (and that wealth mostly acquired as a dealer in photographic materials), to commence the degradation of the profession here. These are the exact facts to that date, and we pronounce any other version as absolutely false, and call to witness the fraternity of this State in support of it. The subsequent meeting of photographers, and resolutions passed, have all been published in your journal. About five or six weeks after this event, Mr. H. L. Perkins, doing business two blocks below Mr. Walzl, felt compelled to reduce prices in order to maintain his patronage, followed by Mr. Clinedinst in one of his galleries, and Mr. Rogers, who was next door to him, then followed. Mr. Robinson (who gave up his old gallery and rented our former stand on the opposite corner to our present place, under our unexpired lease, and subject to such conditions as to prevent his injuring us) then felt the pressure to such an extent that we allowed him to cut his prices. We had compelled him before that, to hold them at not less than five dollars for cabinets; he then commenced an active advertising campaign against the aggressor. And thus it spread.

The next spring and summer Mr. Walzl purchased both Mr. Clinedinst's galleries as branches (on Lexington Street), one of them in charge of Prof. Woodward; and he cut the prices still lower, with the avowed purpose, according to common report, of crushing us out. These galleries were, until lately, run under Mr. Clinedinst's name, although the latter had removed to Washington. Finally, all but Messrs Busey, Cummins, and Bachrach & Bro., reduced their prices to three dollars and lower for cabinets. Last year, in the spring, Walzl, in his branches, reduced the prices advertised, to one dollar and fifty cents per dozen for cabinets. After about six months. Mr. Robinson, in retaliation, reduced to one dollar per dozen, which was, of course, followed again by Walzl in turn; and thus matters stand here, and are likely to, for some time to come.

Now, as to the cause of this raid, some say it was revenge on the photographers of this city for patronizing our stock-house; some say it was to crush us for our opposition to his monopoly in that line, etc. My own opinion is, it was because the public did not patronize his huge place sufficiently,

in spite of his having been for over twenty years in business in this city. work that has been, and is being turned out there, supports this theory; and the matter is further elucidated by his putting a light in his studio, the lowest point of which is eleven or twelve feet from the floor, and that in times when wet plates were worked, and by a man who pretends to be a teacher (?) in photography. That is sufficient, but I shall have something more to say about this individual should he give the occasion for it. This is what there is in the Baltimore price business, and it will serve as a lesson to photographers elsewhere. A fine establishment advertising low prices, must be met by lower ones at once, by the body of photographers in the same place, if they don't want such a concern to prosper at their expense. Only such as occupy a solid position with plenty of backbone, can afford to ignore the fact. We, of course, feel the benefit now, of not having reduced prices, but it cost us some sacrifice.

Respectfully and fraternally,
D. BACHRACH, JR.

We hereby certify that this article contains the true history of matters photographic in this city, and is exact in every respect.

N. H. BUSEY.

DANIEL BENDANN.

WM. F. SHOREY.

A. L. ROGERS.

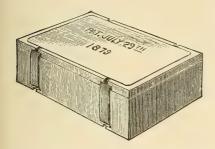
D. J. WILKES.
J. P. BLESSING.
W. M. CHASE.
M. L. ROBINSON.

All proprietors of studios.

A NEW MAILING-CASE FOR PHOTOGRAPHERS.

Photographers have been annoyed and put to great expense because of the real want of a proper mailing-case for their photographs. All sorts of material have been used for the manufacture of these goods, such as cardboard, iron, and so on, but experience has proven that after all there is nothing like wood. Therefore, all will hail with delight the announcement that the trade will soon be supplied with wooden cases, made very light but strongly dove-tailed, with a sunken lid, and fastened by double gum bands. Photographs mailed

in these cases cannot be injured. We have some samples of them upon our desk. They are very neatly made, very strong and very cheap. The manufacturers are the H. C. Underwood Manufacturing Company, Kalamazoo, Mich. Please refer to their ad-



vertisement for list of sizes and prices. The little cut above is a good picture of one of these cases, and shows better than any description how compact and acceptable they are. We commend them to those who have suffered through the mails, and who need protection.

FLEXIBLE NEGATIVES.

ONCE more this subject has been brought under the notice of one of the societies—this time that of the London and Provincial Photographic Association.

Several years ago, when collodio-bromide held sway, attempts were made to apply it to paper instead of glass; none of these, however, were attended with such a degree of success as to have led to glass being superseded. Other peculiar systems in addition to paper were introduced, but before these had a chance of becoming developed in the form of being generally worked, collodion emulsion was deposed in favor of gelatine. The union of gelatine emulsion with paper as a support has already proved not only possible, but quite practical; and, notwithstanding the great advantage possessed by glass as a basis on which to form the sensitive gelatine film, especially in portrait operations, it does not require much acumen to prophesy that for landscape work one department of gelatino-bromide which will ere long become developed in an extensive manner is that of the employment of paper as a support for the sensitive layer.

What are its disadvantages? That which would at first suggest itself is the fear of the grain of the paper producing an effect, greater or less, of granularity in the print. But it was shown by one of the speakers at the meeting to which reference has been made that even in prints from some Talbottype negatives, to which some transparency had been imparted either by waxing or by some other of the means adopted by calotypists for effecting this purpose, the grain seemed to have been practically eliminated, or, at any rate, rendered innocuous. Since those early times in the history of our art, when the recognized system of imparting transparency to a paper negative was the somewhat primitive method of laying it down upon a heated slab and rubbing wax over it, which melted and effected the desired end, the superfluity being absorbed by blotting paper-since those days, we say, although the making of paper negatives has been discontinued, the art of making paper translucent has been steadily advancing, and in this respect we stand upon higher ground at the present time than at the earlier epoch of which we have spoken.

A second disadvantage that might be imagined to be a concomitant of paper as against glass is the inferiority, as regards sharpness, which would result from its employment. This objection, if closely examined will not be found tenable. The image will not be in the texture of the paper, but superimposed upon its surface in a thin pellicle. This being the case, it stands to reason that, no matter how great would be the granularity resulting from the backing of paper-if any such granularity really existed—the quality of the definition in the paper negative would precisely equal that obtained upon glass. If the printing were effected through the paper support, the case would be different; but here the gelatine pellicle and the sensitive albumenized paper are placed in contact during printing.

But sharpness of a high order has been obtained in negatives taken on paper altogether; that is, upon paper which has not received any superficial coating, but contains interspersed throughout its substance the atoms forming the picture. This is the

condition that existed in the now extinct Talbotype process, in which the paper was salted by immersion in a solution of iodide of potassium, and sensitized by a wash of gallo-nitrate of silver. And yet, in Talbot's Pencil of Nature, examples of this process are before the world from which it is seen that the sharpness is such as to enable any person, by the aid of a magnifier, to decipher the titles on the backs of books in Talbot's photograph of a library, a further noteworthy element in this photograph being that it is printed upon plain, and not upon albumenized paper.

It will not, we believe, be said that there exists any exceptional difficulty in coating the paper. A speaker at the meeting alluded to said he laid the paper upon a plate of glass and then applied the emulsion as if coating a glass plate. It is presumable that, after the system comes into more general use, methods will be employed of a description similar to those now adopted in the preparation of carbon tissue. We have coated paper with perfect success by means analogous to those employed in albuminizing, namely, by floating.

With respect to the nature of the paper that will prove best as a support, stiffness conjoined with homogeneity and transparency are requisites which claim the chief place in the selection. Paper mineral has been mentioned as suitable, and, despite its thinness, it may, perhaps, answer well. Still, we think it will in practice be found to be too thin.

At this period we are introduced to something which may turn out to be just what fulfils every requirement. In "Recent Patents," in this week's Journal, we publish the specification of an invention which, if it prove all that its introducers claim on its behalf, may serve a useful end as a support for gelatine emulsion. Suitable paper as regards thickness is rendered transparent by impregnation with copal varnish. When dry the surface is smoothed by means of powdered pumice-stone, and a coating of isinglass is then given, followed by treatment with ox-gall. It is probable that the transparency and stiffness imparted by the varnish will give to the paper such properties as will obviate the necessity of carrying out the patented invention in all its details. We have no doubt that varnished paper has, for purposes of negative photography, been tried by many.

The applications of negative pellicles of the character here spoken of are too numerous and obvious to require noticing in this article. We trust soon to learn that this application has been brought to such a degree of perfection as to be very generally adopted.—British Journal of Photography.

A PERFECT NEGATIVE PROCESS.

During the many years that collodion held its place in the dark-room its difficulties and defects came to be accepted as the necessary adjuncts of a process which after all combined most of the qualities desirable in a negative process. It was simple and inexpensive, comparatively quick, and left little to be desired in chemical effect.

But when the extraordinary sensitiveness of gelatino-bromide of silver became known, new possibilities were revealed, and that quality of itself proved sufficient to enable the new process to oust the old after a struggle, the short duration of which we all have witnessed, and that, too, in the face of a host of difficulties, most of which we are glad to say has since been overcome.

Whether the new process is to prove an unmixed blessing is a question which is now agitating the minds of many photographers who find themselves hampered in the free use of gelatine dry plates by their cost. This increased expense over the wet process, no doubt, often influences the photographer to pass a negative not wholly satisfactory from an artistic standpoint, and which under the old system would have been discarded, and a resitting made. To what extent this interferes with good work it is impossible to say, but there can be no doubt that it would be a great benefit to the art if dry plates could be made as cheap as wet; at any rate the increased cost is a tax which falls directly upon the fraternity, and from which there is, under the present condition of things, little prospect of relief, if we accept the statements of those most familiar with the risk and expense of the manufacture of the plates as now made.

The skill and care required to coat and handle so uneven and unmanageable a substance as glass, the loss from breakage, and the expense of transportation of so fragile and heavy a material, all combine to enhance the cost of the resulting product. So that the glass alone in passing through the hands of the dry-plate maker, necessarily represents an increased cost of nearly one hundred per cent. In addition to this the manufacturers find it impracticable to recoat this glass for the photographer, so that everything conspires to render gelatine dry plates expensive. The accumulation of waste glass to be found in every gallery where dry plates are exclusively used, bids fair to become a serious burden, and already indicates the great waste that is going on. Until this is corrected we can scarcely be said to have a perfect negative process.

The growing demand for a process that will combine the advantages of both the wet and the dry is already stimulating the efforts of experimenters in that direction, and we see indications of these attempts on every hand. One of the latest of these is noticed in a recent editorial in the *British Journal of Photography* (see page 197), and shows the direction that they have generally taken, namely, the endeavor to find a substitute for glass.

This is an old idea, and involves the discovery of an entirely new substance, instead of a makeshift such as is proposed by making paper transparent. There is so little prospect of success in this, that we should prefer to see the problem attacked from some other direction.

What is wanted is a process that will make available the rapidly increasing stock of idle glass in photographers' hands, and give us good chemical effect, rapidity, convenience, and economy combined.

One revolution precedes another, and it is quite possible that the gelatine plate is only paving the way for a more perfect negative process.

ROBINSON'S Pictorial Effect in Photography is the book for "the season"—for the worker under the skylight or sky. See advertisement.

A NEW ACCESSORY FOR PHOTOG-RAPHERS.

THE little cut below represents E. C. Cook & Brothers' folding hammock-stand, made by these gentlemen at 13 & 15 Dearborn Street, Chicago, Ill. Amateur pho-



tographers, and those who work in the studio as well, are always looking out for new accessories, and we believe here is one that is novel and unique, and can be used in a great many pleasant ways in pictures, of all sexes and ages. The thing speaks for itself. Any photographer who is at all an artist, can see what lovely positions can be made with the help of such an accessory, either indoor or outdoor. Moreover, the whole arrangement is so cheap that every one can afford to have it. Refer to the advertisement.

A HINT TO PHOTOGRAPHIC SOCIETIES.*

BY JOHN H. JANEWAY, M.D.

FOR quite a number of years I have had the honor of being a member of the Academy of Natural Sciences of Philadelphia, and up to within the last twelve years the work was spasmodic, and oftentimes three or four, or more members were working with the same object, and trying to arrive at the same point from different standpoints, and generally clashing. Sometimes a discovery would be made by two or more, they would announce it at the meeting, each claiming priority, resulting frequently in bad feeling.

Between twelve and fifteen years ago a member suggested the plan of dividing the work of the Academy into sections, and they commenced then with three or four sections. One section on Conchology, another on Zoölogy, and another on Chemis-

^{*} Read before the Society of Amateur Photographers of New York.

try. They found that the meetings became very interesting. A member well advanced in any one particular branch was appointed a director of a section, and he selected another member as Secretary to note down and report the results of the section at any regular meeting.

Prior to the adoption of this plan the average attendance at the regular monthly meetings was from forty to fifty members, but since then the attendance has run up to as high as two hundred and fifty.

The sections have worked thoroughly, and they have had to increase them to divide their work. The Section on Zoölogy has now been divided into seven or eight sub-sections. Biology has been divided into several sections. They have taken up microscopy. The work done by each of these sections is very thorough; there is a constant steady pressure forward in the work.

The great aim of the Academy has been to get good directors, members who thoroughly understand the branches of science they wish to study. Their work has been, in consequence, constantly advanced, and the membership has more than trebled. If a similar plan is adopted by this Society, I am satisfied you will have good work, and especially if you have a room fitted up with appliances.

You can have a section, for instance, on developers and developing, placing some one of our best men as a director, and he choosing from among the other members one or two assistants; then take in the younger ones-the tyros-and try the developers. Of the different formulas that are sent broadcast over the country, some are good and some are not, yet there may be good in all of them. Let the secretary report the results. Various other sections. devoted to different branches of photography, can be formed, to be carried on in the some manner. The information thus gained will be concise, and of much value to members of the Society.

CRAYONTYPY.

THE production of typographic prints, made without having recourse to the

graver of the artist, is a question now attention. attracting much Notwithstanding the improvement made in helioengraving, it is not yet possible to obtain directly from a photograph an engraved block to be used in the printing press know that it is impossible to print with a typographic press on the reliefs of an engraved plate if these reliefs are not level, and separated from each other by sunken lines more or less broad. Wood engraving is nothing more than a number of cuts more or less broad and close to each other. Wood-cuts being very costly, a substitute has been sought in metal plates automatically engraved by means of acids, from a photographic print.

Among the processes that have met with some success we have that of Ives, which gives granulated prints by the interposition of a network between the photographic negative and the zinc plate which is to be bitten by the acid. But these prints are so monotonous in appearance, and the grain is so regular, that all artistic features are wanting. This process, nevertheless, is in use, which proves the need for an economical mode of engraving. My photographic experiments have led me to make some investigations in this direction, and I have reached a result which I now have the pleasure of placing before our Society. It is not yet perfected, as my leisure moments have not permitted me to follow out these experiments, but it is possible to judge by these specimens that crayontypy may lead to the results sought for.

This process gives with the greatest ease heliographic engravings having the appearance of a crayon drawing on grained paper, hence its name. Here is my mode of operating: In the first place, I procure a gelatine cliché having a relief of from one to one and a half millimetres of the object to be engraved. These clichés can now be obtained of the trade and are specially used in photolithography (Licht-druck). In all places where the image has whites or light tints, the gelatine film is thinner than where are the non-lighted details. For example, the bars of a window show themselves in relief, and the panes of glass in hollow lines. I now take a sheet of auto-

graphic paper grained or gauffered by the machine. This paper is in general use today by designers for chemical engraving on zinc. The greater number of illustrated papers have been using this process for a The artist traces his design on gauffered paper, and gives his sheet to the zincographer, who transfers the drawing, by means of a lithographic press, on a sheet of planished zinc, which is then to be plunged into an acidulated bath. Wherever there is fatty ink the acid does not bite the zinc; but on the uncovered parts the metal is attacked and leaves the design in relief. The plate thus engraved is mounted on a wooden block, and may be now used on the printing press. There is also needed tracing paper having a blue or black fatty coating, and an autographic lever press. Having these different objects ready, I proceed as follows:

I take the gelatine relief cliché, place it on the press, and cover it with a piece of the tracing paper coated with a mixture of tallow and pigment, the prepared side uppermost. On this paper I place a piece of the gauffered paper of suitable size, the striæ resting on the fatty preparation. Finally, on the whole I place a very plane plate of polished steel, and give a very regular pressure in the press; after which I separate the different sheets. On the grained paper I find the exact counterpart of the gelatine design, but stippled. This image being formed of a fatty matter, may easily be transferred to a lithographic stone, or zinc, and engraved with acids. In this manner may be reproduced all the gradations of the original, which are given with more or less delicacy according to the texture of the paper that has been selected. The grain of the paper, having great variety, the crayontype presents a more agreeable appearance than if the engraving had been produced by uniform striæ.

We hope that those whose leisure is greater than ours will take up and continue our experiments, and give to industry a process of reproduction as economical as it is artistic.—Add. P. Eggis, in the Paris Moniteur.

Read Dr. Vogel's Book. \$3.00 per copy.

KEEPING QUALITIES OF GELATINE PLATES.

BY WILLIAM H. PICKERING, Institute of Technology, Boston.

THE following instance of the keeping qualities of a gelatine dry plate has come under my notice, and may, perhaps, interest some of your readers. A year ago a friend gave me two unopened boxes of Carbutt's extra rapid plates, which had been purchased in August, 1881. He also gave me half a dozen plates of the same make, which had been exposed at that time, but had lain since then undeveloped in the plate-holders. On development the pictures came out without spot or stain, and would have been excellent had they not been slightly over-exposed. The two boxes were laid away, and a few days ago, I opened one of them, and tested two or three of the plates. They were in fine condition and as good as new, although they are now very near three years old. On testing them with a sensitometer, they proved to be of very nearly the same sensitiveness as the present Carbutt Special Portrait, but slightly more rapid. It seems to me that if any internal decomposition were going to take place in the plate, it would have done so by this time; and that one may feel justified in saying that a plate which will keep perfectly for three years will keep indefinitely.

On the other hand, if we take a very rapid plate, like the Edward's (English), or the Monckhoven (French), or the Richardson (American), we find they do not keep so well by any means. I have specimens of all these plates, which were purchased in the spring and summer of 1882, and all are more or less decomposed, some in fact so badly as to be absolutely worthless.

It is proposed shortly to publish a list, showing the relative sensitiveness of several of the best known photographic plates, as determined by experiments recently conducted, with specially devised apparatus, in the new photographic laboratory of the Institute of Technology. In the meantime, if any plate-maker thinks he has produced a specially sensitive emulsion, if he will forward me a few plates, I shall be very glad to test them for him.

And now a hint to the newly fledged amateur, of whom there are nowadays so many. Ten to one, when he comes to select a plate for this summer's use, he will ask for the quickest thing in the market. Now if he is going to make a specialty of instantaneous work, with a drop-shutter, or is going to take portraits in a studio, where if one plate fails he can try another, and where he has all the conveniences for development at hand; that is one thing. But if he intends to undertake merely landscape work, with exposures ranging from one second up to twenty, then by all means let him choose a slow plate. It may be objected that a quick plate is better on a windy day; but if there is any breeze at all, one cannot get a satisfactory picture without a drop-shutter; and whether the exposure is one second or five it will make very little difference in the appearance of the plate. The only way is to make the exposure between the gusts, and then one plate has about as good a chance as the other. And now, Why do I recommend a slow plate? In the first place, it is much easier to time an exposure of five seconds than it is one of one, or of a half a second. In the second place, the slow plates give greater contrast between the high lights and shades, so that the foreground seems to stand out more, and does not appear as if the whole picture were seen under a veil. And in the third place, the slow plate is less liable to be disfigured by spots and stains, and plates made from different emulsions are more likely to be uniform in sensitiveness and in appearance during development.

I do not wish in the above remarks to be understood as denying the usefulness of the rapid plate, for it undoubtedly has its place, but I do wish to caution beginners against using one class of plate, when another kind will do their work very much better.

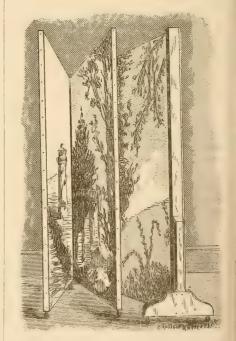
There is one item I noticed in a recent number of one of the photographic journals, recommending the use of a lead pencil to number the plates before they are wet. We have used this method for over two years now, but have recently found that a much better plan is to number the plate in the corner with a stylographic pen. Probably common pen and ink would do quite as well. It is unnecessary to let the ink dry before

putting the plate in the tray for the superfluous ink will be washed off, and when finished the numbering will be as distinctly seen as if written on paper.

[An engraving diamond is better, and the mark not liable to be removed by accident.— Ed. P.P.]

WISE'S DEVICE FOR STORING BACKGROUNDS.

A short time ago I sent you a description of my albumen paper moistener, which appeared in due time in your journal. I now take the liberty of troubling you again for space in your columns to describe a device that I have contrived for storing back-



grounds. This, like my albumen paper moistener, is so simple that I cannot understand why it has not been in use before. If it has, it has not been my fortune to see it. You will see by the enclosed photograph perhaps better than I can describe it. First, I have an ordinary frame made, such as backgrounds in all galleries are fastened on. On each side of this frame I fasten a ground; then on each end of the frame I fasten firmly with

screws, a strip of pine (the height to be determined according to the ground) about an inch thick. The width will have to be regulated according to the number of grounds to be used. I have six on mine, and use the strip three and a half inches wide, but it would do no harm to have it five, as it would admit of more grounds. Then I have a good solid leg, as shown in cut, with two good strong castors under each end. Of course this has to be the same on each end of the frame. It is nothing more than an ordinary frame, built more substantial, with the pine strips running full height of the ground. Next I fasten another ground on a frame, and fasten this frame on the original one by means of two hinges six inches from top and bottom, in front of one of the grounds on frame. The hinges must be fastened on the inside of one of the pine strips, according to which way you wish the foremost ground to swing; then fasten another frame with ground, in front of the one just hung, only fasten the hinges on the front edge of strip, if it is made for that number of frames. Now, under each opposite corner of frame fasten a small castor, also a hook about half way up the side of frame, so as to hold the grounds all fast together. Repeat the same on the other side of the original frame, and you then have six grounds in good working order, and taking up no more room than one frame. When you fasten the frames on the other side be sure to fasten them so that when you turn the frames around the four grounds swing the same way from the sidelight. I find this a very simple and useful device, taking but little room, at the same time having six grounds at my service. The castors under the corners of grounds hold the heft, at the same time working with the greatest of ease, simply swinging one or two grounds aside as the case may require. I give this to the fraternity, trusting some one may be benefited by it, and any information I can give to any one who does not understand it, regarding its construction, will be freely given if they will write to me. No photographer will ever use any expensive or complicated contrivance could he once see with what ease and little room I handle

mine. One of my grounds is narrower and lower than the rest, but by having that for one of the outside grounds it works equally as well. I also have a ground that I use for large groups. This I also have for one of the outside grounds, as I have a side slip to make this ground wider, therefore it is more convenient to have this outside so as to use the slip.

Fraternally yours,

GEORGE W. WISE.

EVANSVILLE, ROCK CO, WIS.

THE DRY-PLATE DEVELOPER.*

A TECHNICAL lecture was delivered by Prof. Charles Forbes at the last meeting of the Rochester Photographic Association, which was listened to with much interest. The following is a synopsis:

The topic of the lecture was the theoretical consideration of the action of the alkaline development of the gelatine dry plates. The subject proper was prefaced by a brief review of the atomic theory of matter as it is now received by scientists. This prepared the Society more readily to understand the various technical terms used in the discussion. The manner in which the silver salts are formed in the gelatine emulsion was next explained. The principal salt formed is, in all emulsions, silver bromide. Small quantities of silver iodide and silver chloride are often used in combination. Inasmuch as the silver bromide is the foundation salt in the emulsion, the lecturer gave his attention principally to this in his consideration of the action of the developer. The silver bromide in the emulsion is formed as follows: An aqueous solution of silver nitrate is added to some bromide salt, as potassium bromide. double decomposition occurs, which may be indicated as follows:

Potassium Bromide and Silver Nitrate become

KBr + AgNOs =

Silver Bromide and Potassium Nitrate

AgBr + KNOs.

The silver bromide is held in suspension in the gelatine. The soluble salts are thor-

^{*} Read before the Rochester Photographic Association.

oughly washed away. Now, when the molecules of silver bromide (AgBr) are acted upon by light, they undergo a change, and molecules are formed having the composition represented by Ag₂ Br, called silver sub-bromide. Thus:

Silver Bromide acted on by light becomes
Ag Br
Ag Br
Silver Sub-bromide and Bromine

+

Br.

From the molecules of silver sub-bromide the metallic silver may be quickly precipitated by the developing solution, whereas from the silver bromide it is very slowly reduced. It will be understood, then, that when the plate is exposed in the camera that the developable image is formed by the light changing the molecules of silver bromide to those of silver sub-bromide. The office of the developer is to precipitate the silver from the silver sub-bromide, and form the visible image on the plate.

The credit of the discovery of the alkaline development is due to Mr. Borda, of Philadelphia, and Mr. H. T. Anthony, of New York. Mr. Glover and Mr. Leahy, and Major Russel, of England, gradually brought it up to its present condition. To the latter we are indebted for the potassium bromide.

The alkaline developer consists of three things—a strong absorbent of oxygen, like pyrogallic acid, an alkali, and a soluble bromide, like potassium bromide. The first two are the only ones necessary to reduce the silver from the silver sub-bromide.

The chemical reaction of the pyrogallic acid and alkali (ammonia) on the silver subchloride may be indicated as follows:

That is, the pyro having a strong affinity for oxygen, takes it from the ammonia, converting it into ammonium and water. The ammonium thus liberated combines with the bromine of the silver sub-bromide, forming ammonium bromide, and the metallic silver is deposited to form the visible image on the plate.

The newly deposited (nascent) silver has this peculiar property, it will combine with the adjacent molecules of silver bromide, and form silver sub-bromide, thus:

 $\begin{array}{ccc} \text{Nascent Silver and Silver Bromide} \\ & \text{Ag} & + & \text{AgBr} & = \\ & \text{Silver Sub-bromide} \\ & & \text{Ag}_2 \text{Br}. \end{array}$

From these new molecules the silver is deposited in turn, and thus the process goes on until a much larger quantity of silver is reduced than could be possible from the original sub-bromide.

Just what is the chemical reaction of the potassium in controlling development is not positively known. It has been suggested that the bromine combines with the silver sub-bromide and converts it into silver bromide, thus:

$$Ag_2Br + KBr = 2AgBr + K.$$

So that when a small quantity of the bromide salt is added the effect of the light is partially udone. The effects produced by using first, an increased amount of ammonia, and then an increased quantity of pyro, were explained.

Dr. Forbes's remarks were listened to with marked interest by the members of the Society, and at the conclusion of the lecture, on motion of Mr. Wardlaw, he received their thanks.

DISCUSSION.

The first question for discussion was as follows: In a group of three, a lady and gentleman in black, and a child in white, the lady and child light complexioned and the man dark, how ought the group to be lighted and developed?

Mr. Wardlaw: If time were taken to bring out the drapery in the man, the lighter portions would be over-developed. When the image of the man was developed nearly enough, I would stop and proceed to get a proper density for the lady. A weak solution of bromide might be laid over the image of the lady and child, and allowed to remain a little while, then I would wash it off and proceed to obtain density. A good deal could be done in lighting such a group.

Mr. Kent thought it was not so difficult

to handle such a subject as the question implied. In every picture there are dark portions. The stronger lights should be thrown on the darker objects. The exposure should be for the darker portions of the picture. Light for the darker portions is the rule, and the light portions will take care of themselves. It is often difficult to light for a single subject. Sometimes a lady will be dressed in white, with dark hair or her face shaded. You must, in such case, time for the darker portions. Dry plates are superior to wet plates for handling the subject described by the question. Mostly all workers with dry plates will agree that there is greater latitude in the use of dry than of wet plates.

After the usual routine business the Society adjourned.

A DISCUSSION ON PRICES.

(Continued from page 186.)

V.—To be Continued until there is a Reformation.

THE interest continues to grow in this subject, and the thing is working as we would wish it—except, perhaps, a little slower than is desirable.

Some of those disposed to lower prices, or who have lowered them, are getting tired, and a better state of things is coming. Some months ago an old and long-established firm dissolved partnership, and the seceding party opened a new studio alone and for himself, starting with fair prices. counteract any possible chance of the new establishment drawing away their patronage, the old firm issued some thousands of neatly and prettily printed circulars, not only setting forth the great advantages of "the old house," but offering, "for the next two months only," to make "cabinet photographs at the greatly reduced price of five dollars per dozen." This was not a "low" price comparatively, but it was a comedown for this veteran and high-standing firm. They are sorry they made the offer. Their old partner still holds out; they added nothing to their business (for no great avalanche of trade came in answer to their circular), and it will be a trouble to them to get back to seven or eight dollars per dozen. Don't try it.

We are not ready yet to publish the leaflet of prices, etc.; it will come soon. We have been favored by many with lists of their prices and—please send many more.

The following card was placed in our hand soon after breakfast the other day:

CLUB TICKET.

GEORGE C. POTTER,

Artist and Photographer,

(Formerly of Eighth Street) now at

N. W. cor. 13th & Market Streets, Offers, in order to show style of his work, the holder of this ticket, 12 Fine Cabinet

Photos for \$1.50. A Crayon for \$8, worth \$30. Remember, 13th and Market Streets.

It is about the lowest yet.

When in Detroit a few weeks ago we found a better state of affairs beginning. One firm, which had been running cabinets at three dollars per dozen, then advertised as follows:

"Attention !"

"—, — & Co. will hereafter charge \$6 per dozen for their best cabinets, and for this price we can and shall make you the finest work to be had. We still make \$3 per dozen cabinets. They are upon different cards, yet not near as fine as our best."

This is a good way to kill the three-dollar business, and the only way to creep up to higher prices. Try it, gentlemen and ladies; show the two kinds, and as a rule the extravagant propensities of the people will lead them to have "the best."

Another good thing has been done in the right direction. The photographers of Syracuse, N. Y., are acting like men. They met some time ago and agreed to divide themselves into two classes; to arrange two scales of prices and adhere to them. Their prices fixed were, with rules and regulations, printed on large colored cards and placed conspicuously in the several galleries. What follows is taken from them:

PRICE LIST-GRADE FIRST.

Cards: One, \$1; half doz., \$2; one doz., \$3. Duplicates: One, 25 cents; half doz. \$1.25; one doz., \$2.

Cabinets: One, \$2; half doz., \$4; one doz., \$7. Duplicates: One, 50 cents; half doz., \$3; one doz., \$5.

Boudoirs: One, \$2.50; half doz., \$5; one doz., \$9. Duplicates: One, 75 cents; half doz., \$4; one doz., \$7.

8 x 10 Panels: One, \$3; half doz., \$6; one doz., \$10. Duplicates: One, \$1; half doz., \$5; one doz., \$8.

4 x 4: One, \$3; half doz., \$6; one doz., \$10. Duplicates: One, \$1; half doz., \$5; one doz., \$8.

8 x 10: One, \$4; half doz., \$7; one doz., \$12. Duplicates: One, \$1.25; half doz., \$6; one doz., \$10.

11 x 14: One, \$5; half doz., \$15; one doz., \$25. Duplicates: One, \$2; half doz., \$10; one doz., \$18.

 14×17 : One, \$8; half doz., \$20; one doz., \$30. Duplicates: One, \$3; half doz., \$10; one doz., \$25.

Rules and Regulations.

I. All photographs must be paid for at the time the sitting is made, or, in the case of duplicate orders, when the order is given.

II. An extra charge will be made (in proportion to the size or style of the picture) for all resittings.

III. An extra charge will be made for all groups of more than three persons, in proportion to the size of the picture and number of persons in the group.

A cheerful compliance with the above rules, by our friends and patrons, will secure our best endeavors that all work entrusted to us shall be properly and satisfactorily executed.

CURTISS & SMITH, P. S. RYDER, M. EDWARD CURTIS, W. V. RANGER.

The announcement of the lower grade, with the same rules and regulations, is below:

Cards: One, \$1; half doz., \$1.50; one doz., \$2. Duplicates: One, 15 cents; half doz., 75 cents; one doz., \$1.50.

Cabinets: One, \$1.50; half doz., \$3; one doz., \$5. Duplicates: One, 35 cents; half doz., \$2; one doz., \$3.

Boudoirs: One, \$2; half doz., \$4; one

doz., \$7. Duplicates: One, 50 cents; half doz., \$3; one doz., \$5.

8 x 10 Panels: One, \$2.50; half doz., \$4; one doz., \$7. Duplicates: One, 75 cents; half doz., \$3.50; one doz., \$6.

8 x 10: One, \$2; half doz., \$5; one doz. \$8.50. Duplicates: One, 75 cents; half doz., \$3.50; one doz., \$6.

10 x 12: One, \$3; half doz., \$6; one doz., \$9. Duplicates: One, \$1; half doz., \$5; one doz., \$8.

11 x 14: One, \$4. Duplicates: One, \$1.50

Rules and Regulations.

Same as above.

ROBT. A. GOODWIN,
I. U. DOUST,
A. H. PARKER,
PHARES & SULLIVAN,
ALLGIER & WELLS.

These are all cheerful signs of the times, and things are working as we want them. Now a few more voices from the craft in this matter:

Prices for photographers seem to be the most difficult and vexatious question just now to settle. It certainly is very annoying to one who has spent several years working up a business to have a stranger come along and try to get the trade by cheap prices, it being his only recommendation, this same party having run himself out in some other locality by cutting prices there. While he cannot take good trade away, he makes them unsettled and dissatisfied. My experience is, that the best way to treat these fellows is to pay no attention to them directly. Instead of reducing your prices, spend some money for printer's ink, and have your advertisements gotten up in good readable shape; fresh matter every week or oftener. It is much better to spend fifty or sixty dollars a month this way for two or three months, or even six, than to cut your prices two dollars a dozen for a year or longer. The cut costs you more each month than the advertisement. For two years a fellow has been pounding away here with this ad. :

"Cabinets, in clubs of ten, \$2 per dozen. To the former of the club, one dozen free. H. Clay Jones, late with Sarony, operator."

The three leading galleries get the same prices they did before he came. He has made no money here and never will.

It is a great mistake to think that good work can be made less than six dollars a dozen for cabinets. Your customers think less of you and your work at cheap prices than at fair prices. Those who catch at cheap prices would not patronize a good gallery. My prices for cards are \$3 a dozen, \$2.50 for half dozen. Cabinets, \$6 a dozen, \$4.50 for half dozen. Plain mounts, \$8 a dozen, \$5 a half dozen. Cabinets on black and gold bevel edge, 7×9 , \$12 a dozen, \$8 a half dozen; $7\frac{1}{2} \times 13$, \$20 a dozen, \$12 a half dozen.

Out here I catch a good deal of Eastern trade. They speak of cheap prices, but do not hesitate to order here and to order duplicates, showing that they appreciate the work as well as prices.

There are twelve different places in town where prices are from two to five dollars a dozen for cabinets, and three places where they are higher.

Strauss.

ST. Louis.

I am sorry to see such a deadlock in the matter of prices among photographers in the United States. I get pretty good prices here, and fancy, had I to work for less, that I would have to get out of the business. \$7 per dozen for cards, \$9 for cabinets, prom. \$12. But then I suppose that a gallery of the same standing as mine would do as much work, or at least have as much trade, in one week as we have in a month or two. However, I hope to hear through your excellent journal of a steady rise in prices all over the States, as low prices I think are degrading to the profession. A private letter from a photographic friend of mine in New York tells me that times are exceedingly bad there in photography. He says the club system has ruined the business, and that there are numbers of photographers who were in real good standing trying to sell out of the business altogether. Thank goodness, we have no clubs here.

S. H. PARSONS.

ST. JOHNS, N. F.

I see a good deal said through the photo. publications about low prices and how to

prevent them, etc. etc. But just as long as a photographer holds such contracted ideas or selfishness, I think there is no way to prevent it. If there could be some way to shame them, perhaps it could be accomplished, but I do not know how to get at it. I would, for one, like to see better prices established. I would like to see all the Cheap Johns wiped out, but how to accomplish this I cannot conceive—only to shame them; but to do this is the rub again; they do not appear to have any. Their ideas do not soar very high.

A. M. ALLEN.

POTTSVILLE, PA.

I see no other way out of the trouble but for photographers to take a firm stand Set their prices on their work, and then put it before the public by advertising in their home papers. I have no trouble in regard to prices. I get all I ask, and I do believe I could raise a dollar per dozen in most any style and get it without any trouble. We have three galleries in our place May send you some work soon. Was pleased with last Photographer. Give us more pictures. Yours, etc.,

H. G. PARCELL.

KIRKSVILLE, Mo.

Your war on prices suits me to a dot, as it is something I commenced with the picture business nearly twenty years ago and am still waging, but have never yet worked as cheap as my opposition. I live in a small town in "grasshopper Kansas," and have always been able to keep up my prices against an opposition of two and three all the time besides tents, and now I have more than I can do, although I have been told I do more work than a gallery in an adjoining town where there are six workmen busy all the day.

I think the plan proposed by Mr. Van Loo seems to be the best I have heard, and far better than I could have conceived. Trusting in your prosperity, 1 am most truly, Yours,

D. Rodocker.

WINFIELD, KAN.

It is true the "cheap" class of men hurt good photographers of intelligence and skill, acquired by hard study and long practice. to some extent; but, after all, they catch only a class of trade that would not be desirable for the genteel photographer. this leads me to think that if we had an institution to educate young men to become good photographers-an institution that would not only teach them the theoretical and technical points of the profession they have chosen, but also teach them that a photographer, as well as a member of any other profession, has a right to surround himself with that professional dignity that commands the respect of his patrons-this tedious question of prices would soon be disposed of. H. PIETZ.

SPRINGFIELD, ILL.

I am glad you are making an effort to secure the cooperation of the fraternity in raising the prices for photographs, which I hope will be accomplished; but I have hardly faith in the ultimate success of same for the reason that my long experience has taught me that the photographer who is capable and willing to do the best work will always get the best prices, while those who treat the art lightly will offer their productions at great discount, and in most cases accept any price rather than lose the ignorant customer. With much esteem, and trusting that your labors may warrant the success they deserve, I am,

Yours very truly,

THEODORE LILIENTHAL.
NEW ORLEANS, LA.

You know I do not stop the PHILADEL-PHIA PHOTOGRAPHER till the North wind stops. I have all the years it has run, and will be in the race as long as both are in it.

As regards prices, I hope some effort will be successful in breaking up the low-price system. We are cursed with cheap work here. I am happy to say no one is getting better prices than I am; but we let a great many callers go to the cheaper galleries, because we don't come down to their lower level. I think it will end in having galleries graded—first, second, and third class, and arrange a price for each. But when you look at it in a certain sense, one would prefer to have these establishments called first-class, and it might spur them up

to better prices to obtain it. But there will always be a class that cannot recognize the difference between good and poor work that will go for *cheapness* any way. Well, it is a good thing to have a few such galleries to turn such people to, and get the cream of the trade by good, honest work yourself.

Hoping the journal will help the craft generally as it should be, mutual for all parties to strive for better prices, and better prices to follow, I will close.

WALTER. C. NORTH.

UTICA. N. Y.

I, for one, am grateful for any effort to raise our profession. The signs are not encouraging, however, so long as there are so many of us to live off so many customers. It is only here and there that anyone can rise so far above the common level as to make the public willing to pay three or four common prices for his work. When I came to Springfield, three and a half years ago, I took my scale of prices from my predecessor. Raise them I could not, though some, at least, are too low; but they have not been lowered.

I do not believe it is possible for any league or association to be formed to control prices, for the men who will ruin others' trade to fill their own pockets are not men to be trusted, and I would not take their word for anything where their interest was concerned. You will more than ever merit the thanks of the photographic community if you can succeed in making the profession more respectable by raising prices; but I think it is a battle to be fought by every man for himself, on the basis of his artistic and business ability, his honor, and his pluck—a true "survival of the fittest."

F. W. HARDY.

SPRINGFIELD, MASS

I do much the largest business, and have no difficulty in getting my price. The others say that if they were to charge the same price as I do they would get nothing to do, as the public will go to the largest place, where they can get the best work, if they have to pay the same price for it.

All towns and cities will have second- and third-class galleries, as their proprietors have not the means to rent and furnish a first-class place, nor the brains to produce first-class work. Brains will command their price as surely as water will find its level, and as we all make our own prices, we charge what we think our work is worth, or all we can get for it. We have low-priced preachers, lawyers, and doctors, and probably they all get all their services are worth. And so it will ever be in all professions. A man naturally finds his level in society or business.

I will gladly second any effort to elevate our profession, or take it out of the hands of those men who have no love for it and are willing to work for laborer's wages, if you will point the way.

GEORGE PINE.

TRENTON, N. J.

SOCIETY GOSSIP.

THE PHOTOGRAPHIC SOCIETY OF PHILA-DELPHIA.—The regular meeting was held on Wednesday evening, June 4, 1884. The President, Mr. Joseph W. Bates, in the chair. Forty-five members were present.

The minutes of the last regular meeting were read and approved.

The Excursion Committee reported that the excursion to North Carolina was abandoned, owing to lack of a sufficient number of members to make it a success. It was then decided to make a trip through Pike County, Pa., and the following members-Messrs. J. W. Bates, Frederick Graff, S. F. Corlies, F. T. Fassitt, Charles Barrington, Samuel Sartain, W. D. H. Wilson, Frank Bement, Edward L. Springs, and Caleb Cresson, with visitors Messrs. Tripler, Judd, and Paul Sartain-left Broad Street station at 8.20 A.M., May 22d, for Stroudsburg. Carriages were there taken for Dingman's Ferry, arriving at Dr. Fulmer's Dingman Hotel about 6 P.M., where the party were comfortably and very pleasantly entertained for a week, taking daily carriage drives to the many beautiful points of interest, such as Milford, Sawkill, Raymondskill, Adams Creek, Factory Falls, Indian Ladder, Soap Trough, High Fall, and Bushkill, having good weather and a delightful time generally. Six hundred and nineteen plates were exposed, with results, as far as heard from, entirely satisfactory. Regretting that they could not make a longer stay, the excursionists arrived home at 10 P.M., Thursday, May 29th.

Mr. Pancoast, on behalf of Mr. Thomas Bolas, F.C.S., of London, presented to the Society the first six volumes of the *Photographic News*, thereby completing the file of that journal belonging to the Society. The thanks of the Society were unanimously tendered to Mr. Bolas for his valuable gift.

Mr. McCollin showed a new drop-shutter, of a combined flap and drop form. Either long or very short exposures could be given with it, the foreground receiving longer time than the upper part of the picture.

Mr. Browne moved that the monthly meetings of the Society be continued during the months of July, August, and September, but that no legislation except the election of new members be transacted. Carried.

Mr. Carbutt showed some fine instantaneous pictures of the recent bicycle parade in Washington, taken on his "Special" plates, by Mr. E. C. Haight, of that city.

Two questions were in the box, asking:

1st. If a plate happens to be properly exposed, does the addition of citrate of soda have any other effect than to make it develop more slowly?

Mr. Carbutt replied that the effect was simply to lengthen the time of development.

2d. What means is there of ascertaining when a silver print is properly fixed?

Plain paper will become translucent when thoroughly acted upon by the hypo, but with albumenized paper this test is less reliable. From ten to fifteen minutes in a bath varying in strength from six to eight ounces of water to one ounce of hypo should be sufficient time for fixing.

Mr. Pancoast gave an account of his trip to India, relating his experience with English dry plates, his manner of working in India, facts about the scenery and the buildings of the Calcutta Exhibition, and also much that was interesting about the English societies and photographic matters in England. He stated that in England dry plates were used exclusively for all ordinary purposes. Several convenient pieces of English photographic apparatus were

shown by him, among which were a small folding plate-rack, and a rubber tray made so that it could be rolled up into a very compact form for packing.

A vote of thanks was tendered to Mr. Pancoast for his very interesting narrative of his trip.

Mr. Fassitt stated that he had tried a recipe recommended in one of the journals for the reduction of over-exposed gelatine negatives, by the use of sulphate of iron and common salt. Though he had diluted the mixture to one-fourth the strength given, the picture had been entirely obliterated.

On motion of Mr. Coates, the Secretary was authorized to procure a blank-book, to be kept in the room of the Society, in which members could make a record of any desirable photographic localities or subjects they might know of, with the time of day when properly lighted, means of access, and other points of interest to those in search of subjects.

A number of pictures taken during the Pike County trip were shown by those who had participated in the excursion.

On motion, adjourned.

ROBERT S. REDFIELD, Secretary.

CLEVELAND, OHIO, May 27, 1884.

MR. EDWARD L. WILSON,

EDITOR PHILADELPHIA PHOTOGRAPHER.

Sir: A new Society was organized May 6, 1884, under the name of "Cleveland Amateur Photographic Association," with the following officers: Mr. Wm. T. Higbie, President; A. H. Hough, Secretary and Treasurer; C. C. Lee, L. S. Corning, W. T. White, and H. C. Corning, Trustees.

A. H. Hough,

Secretary.

THE second meeting of the Missouri and Illinois District Photographic Convention was held at Quincy, Illinois, June 25th. Samples of work were shown and a good time had.

J. C. DEANE,

Secretary.

Philadelphia Amateur Photographic Club.—The regular monthly meeting of the Philadelphia Amateur Photographic

Club was held Monday Evening, June 16, in the Assembly-room of the Society. Mr. H. L. Roberts in the Chair.

The minutes of the last meeting were read and approved.

The Executive Committee reported that the work on the printing-room was in progress, and hoped in a few days to be able to afford members the means of doing their own printing.

The Executive Committee also reported that two excursions had been made, one on Decoration Day, and the other on the 15th of June, and that the members who had participated in them had experienced much pleasure and profit.

A number of excellent negatives taken on these excursions were shown, those by Mr. Frank Gaskill, of scenery along the Wissahickon, being very artistically chosen.

The Committee on Revision of Constitution and By-Laws reported that a draft of the new Constitution had been made, and that it was in condition to be presented before the members. It was, however, thought best to defer the matter to a subsequent meeting, when a fuller attendance of members might discuss its defects and merits.

Mr. Haines moved that a temporary increase of two members be made to the number of the Executive Committee, to lighten the duties imposed upon it. The motion was passed.

A letter of thanks was directed to be sent to the St. Paul Dry-plate Company, for a package of plates presented to the Club, and inquiry made as to what stockdealers in Philadelphia kept this brand of dry plates on hand.

A letter was received from Mr. Bonscure, a former member of the Club.

'A good idea of the Club is the institution of a question-box, after the example of the Philadelphia Society, where all communications may be deposited, or questions on any photographic subjects which are to be read publicly and made the subject of discussion by the members.

Mr. Haines thought that some method should be taken to excite an interest in the meetings. He hoped that the question-box would call forth the latent energies of the members, but thought that papers on special

subjects might be written by some of the members, and be read at the meetings, to the edification of the rest.

Dr. Lowenberg thought that the subject should be of an original character—the result of experiments of the members, individually or collectively. He firmly believed that there is enough talent in the Club to make such a scheme a complete success.

The Club is, indeed, progressing rapidly, and the harmony and goodwill which exists among the members argues well for its continuance in growth.

After an exhibition of lantern-slides, the Society adjourned.

THE SOCIETY OF AMATEUR PHOTOGRAPHERS OF NEW YORK.—This Society celebrated the opening of its new permanent rooms, in the Sloane building, on the evening of June 4th, with a lantern exhibition (the first of the kind given by the Society) of slides made by amateurs.

The lantern used was manufactured by Charles Beseler, of New York, and loaned by him for the occasion. It was very successfully manipulated by Mr. George H. Johnson, of Bridgeport, Conn., an amateur of some note, and many of the slides shown were made by him, embracing a variety of scenes in the Adirondacks. He stated that most of the slides were made upon wet and colldion-bromide plates. Several of them elicited very favorable comment.

Dr. John Butler and Mr. Robertson furnished some interesting microscopic slides.

Mr. Gilder brought slides of instantaneous subjects; some of his marine views were especially good.

Mr. James Brush, an amateur of only a year's standing, exhibited slides made upon albumen-gelatine plates, which were remarkable for their clearness and brilliancy, and excited the admiration of all present. They demonstrated the possibilities of gelatine plates, and surprised many old amateurs in the audience. He stated that his method of working was to expose the sensitive plate in contact with the negative in front of an artificial light for from ten to fifteen seconds, about one foot away, the exposure varying according to the density of the negative. The development was made

with oxalate of potash and iron, the latter being strongly acidified with citric acid.

Mr. George Riply showed a few slides made upon ordinary gelatino-bromide plates, which he said were developed with sulphopyrogallol and carbonate of soda, the pyrobeing preserved with sulphurous acid and sulphite of soda. The slides were perfectly clear in the high-lights, free from all stain, and possessed a very agreeable tone. He claimed that it was perfectly feasible to obtain clear transparencies with pyro and soda when sulphurous acid was used.

After the exhibition, which was enjoyed by everyone present, a social reception took place, in which a few lady friends participated. Members invited their friends to inspect the rooms, and many were interested in the dark-room, which is commodious and well adapted for the work intended. A peculiar system of ventilation, invented by Mr. Beach, has been adopted. Lockers are arranged along one side of the room for the use of members, and upon the other are several sinks, faucets, shelves, lamps, etc., affording every convenience for work.

It is expected that the dark-room feature will become quite popular, as many amateurs in New York are obliged to put up with poor substitutes for dark-rooms.

Conveniently arranged at the Broadway end of the main room is a large table, upon which are placed all the English and American current files of photographic literature, including copies of the latest English and American patents; and in a neat bookcase near by are many volumes of some of the latest and best works on photography, which have been supplied through the generosity of Mr. Wilson, editor of this journal, the Scovill Manufacturing Company, and Messrs. Anthony & Co., of New York.

Equipped with a fine library, a well-arranged dark-room, a good meeting-hall—centrally and conveniently located—The Society of Amateur Photographers has a future before it such as no other similar society has enjoyed.

The rapid increase of membership betokens for the Society a prosperous career.

The first regular meeting of the Society in their new quarters was held on the evening of June 10th. A large number of members were present, including a few ladies.

The President occupied the Chair, and, in calling the meeting to order, congratulated the members upon the auspicious start the Society had made.

The minutes of the last regular meeting were read and adopted.

Interesting communications were read from Mr. Bolas and Mr. Fry, from abroad, and from the Cincinnati Amateur Photographic Club, and Mr. Greenleaf and others at home.

Resolutions of thanks were passed to the various parties who had contributed to the Society's library and treasury.

Amendments to the Constitution, which had been proposed at a former meeting, were voted upon and adopted; their chief tenor being to raise the annual dues, and to establish an initiation fee, thereby putting the Society upon a better financial basis, and making it self-sustaining.

On motion of Mr. Joseph Beach, the Secretary was directed to notify other amateur associations of the opening of our rooms, and to extend to their members who may be visiting this city an invitation to avail themselves of the privileges of the same.

The President stated that Dr. Janeway had requested him to extend a general invitation to all the members of the Society to visit Governor's Island, and avail themselves of the use of his dark-room, should they require it.

After Mr. Newton's remarks, the Chairman spoke as follows: I had a little experience not long ago in developing an instantaneously-exposed plate with carbonate of potash solution. After it was all developed and ready to be removed from the developer, the gelatine film gradually floated up off the plate, which was supposed to be what they term an insoluble plate—requiring no alum or anything of that kind. The manufacturer stated that this difficulty sometimes occurred when the plate is left too long in an alkaline developing solution.

Mr. Newton: I have experienced the same difficulty, and attribute it to the coating of the plate on the wrong side. The alkali exerts no solvent power on the gela-

tine at the strength ordinarily used in developing. The first process in the manufacture of most gelatine plates is the coating of the glass with a substratum of a very thin solution of gelatine in which a small quantity of bichromate of potash has been dissolved. This is exposed to the light, which hardens the film, and the coating of the emulsion is then spread on the prepared surface. But it sometimes happens that in this process the emulsion is spread on the unprepared side, and in that case the film is almost sure to rise in blisters, and frequently slips off during development. have frequently had plates that were coated in this way, and the fault can be easily ascertained by examining the side opposite the one coated with the emulsion; you can feel it and see it.

Mr. Joseph Beach: I would like to have some one tell us about the strength of the developer to begin with.

The Chairman: The method I generally practise is to put into a given quantity of water what I consider the requisite amount of pyro for the plate (different brands of plates require different amounts of pyro), and commence with a minimum quantity of alkali solution, continuing to add a small quantity at a time until the image comes up with sufficient rapidity, and until all the details in the shadows appear to be fully out. In that way you will succeed in development, no matter if a plate has been greatly over-exposed. By careful manipulation you can generally obtain good negatives

Mr. Joseph Beach: How far should the development be carried?

The Chairman: When the shadows turn a dark, steel-gray color, it is then time to stop the development, unless the density is not sufficient. If you think the density is insufficient, then add a little more pyro, and continue the development for a short time. The advantage of using sulphite of soda in connection with pyro is that all stains are prevented, and you can keep the plate in the developer without danger for a long period of time.

A lantern exhibition of a few albumengelatine slides made by Mr. Brush then followed; and the meeting closed with a description and explanation by Mr. Paddinghaus of a model of Mr. Frank Pearsall's compact camera for amateurs, and also his improved dry-plate holder.

The Chairman gave notice of the first field-club excursion, which is to embrace a trip on a steam-yacht up the Hudson, between Peekskill and Cornwall.

GERMAN CORRESPONDENCE.

Photography of Colors in the Right Proportion of their Brightness—The Grain in Photography with Films Sensitive to Colors—Azaline—Purifying Gelatine for Emulsions—A New and Interesting Application of Photography—Photography in Private Residences.

THE publication of my experiments with the colored collodion process has given rise to much discussion and to many articles upon the subject. Everywhere experiments are being made in the same direction, and if a new impulse be given to the science, I shall be abundantly gratified. It is, however, a well-known fact that the moment any new discovery is made known to the world, there spring up a thousand and one claimants, who argue that they long ago had found out the same fact. My discovery in colored collodion is no exception to the rule. It is possible that a similar process may have been recently worked by others, as, for instance, that of Braun's, in Dornach, for the process is not of yesterday. It is now ten years or more since I first made known my experiments; but the gentlemen who since that time have worked in the same direction have kept the subject secret, and the credit, therefore, belongs to him who first made the discovery. Liebig says, in his Chemical Letters, "Every new discovery, every new idea, every new truth in science, as well as in life, has two tests to which it is subjected. In the first period of its existence it is proved that it is not true, or that its value is nothing. If, happily, it survives this period, then the cry is, 'Oh! that was known long ago; that is as old as the hills.' It is only in the third period that it is suffered to yield its fruit." The third period for my discovery has, however, been reached, since the process is at present practically in operation in different galleries of Germany.

I must now make known a peculiar advantage in the colored collodion process, which was even a cause of surprise to myself. On taking pictures with the ordinary iodo-collodion, there is manifest a peculiar grain, which is not present in the colored collodion process. Frequently I took the same picture in succession with ordinary iodized collodion and with the colored collodion. With the former there was a persistency in this grain, while with the latter, under the same conditions of light, often not even a trace of granulation was visible. These phenomena I and my pupils have so frequently verified that we have no longer any doubt upon the subject This establishes a predominance for the new process. The rationale of the process is that the shadow of the grain of the paper is illuminated by the yellow reflected light of the gallery; this light acting upon ordinary collodion plates like black; but with the colored collodion plates it acts like white, and hence the shadows are not dark, but light-and hence do not appear.

I have not confined my experiments wholly to colored collodion, but have extended them to gelatine plates, which are sensitized to yellow by being subjected to a bath of eosin solution, two parts of eosin solution (1 of eosin, 400 of alcohol) to a hundred parts of water. But the bathing of the plates in the eosin solution does not give as good results as when the eosin is added to the emulsion. The bath is apt to occasion fog, and there is likewise a tendency in the plate to resist in certain spots the absorption of the liquor, and hence remain in such points unaffected. It is better, therefore, to make a fresh emulsion, with two per cent. of eosin solution.

It is worthy of remark that with different emulsions eosin acts differently, that is, it is unequal in its action. Many emulsions excellent in every other respect, are not at all rendered sensitive to yellow by its addition, while others exhibit this yellow sensitiveness. This sensitiveness varies also, sometimes one-fifteenth, sometimes one-third the blue sensitiveness. The yellow

sensitiveness is also more striking when the exposure is made with the plate in a wet condition than when in a dry state. Clayton, of Paris, has now eosin plates in the market which for yellow are double as sensitive as for blue; but they do not exhibit any red sensitiveness. I have investigated the coloring substance of these plates, and have discovered that it is not eosin; in consequence of which I have instituted an entirely new series of discoveries on the action of coloring substances upon gelatine plates, and have obtained some surprising results. I have discovered a coloring process which I call Azaline, which communicates both a yellow and a red sensitiveness to gelatine plates. Azaline plates will soon play an important part in portrait photography.

Since the emulsion process has made its boundaries wider and wider, it has been the aim of manufacturers to furnish suitable gelatine for the process. There are varieties enough in trade which do not give very favorable results, either by the digesting method or by the ammonia process. I have had my own troubles to battle with in this direction, until I found a method of thoroughly and easily purifying gelatine. I have tried it for years, and with the poorest sorts of gelatine, and can recommend it with good conscience. It is as follows: The doubtful gelatine is soaked in water (distilled water is to be preferred), and allowed to stand eight minutes, then poured off; this is repeated seven or eight times. This is all. The gelatine is now clean, and may be trusted in the making of emulsions. I usually weigh out the proper quantity of gelatine for the emulsion process, and subject it to the washing process, draw off the wash-water, and melt the residue. Of the melted portion, I take one-fourth for emulsification, and three-fourths to add after digestion. Very bad gelatine is best employed directly after the washing, at least it is best not to let it stand for any length of time. Gelatine which, when used immediately, gave good results, twenty-four hours later showed traces of decomposition. That the washing process is effectual anyone may be convinced of by referring to my gelatine tests, which have been published for years.

An ammonia-silver solution may be prepared by adding to a silver solution (1-10) ammonia until the precipitate formed is redissolved. This is added to the gelatine, which is to be tested after the swelling in water and warmed; if the mixture turns brown, or even yellow, the gelatine is not to be used.

Recently Dr. Broucki, in Mesopotamia, informed me of an interesting application of photography. He writes:

"Some time ago, by a lucky accident, I came in possession of a work which up to the present time, despite the most diligent search, has remained hidden, namely The Book of the Jeziden, erroneously called 'The Devil's Prayer-book.' This book contains the religion and partial history of this mystic sect, a single copy of which alone exists. All that Mr. Layard and other authors have written from hearsay concerning the matter is false. These gentlemen were intentionally deceived by their informants, and they were credulous enough to take the knowledge offered them for pure coin. They probably were not aware that it is the solemn duty of every Jeziden to keep inviolate the mysteries of their religion to the minutest detail from the infidels of other sects. When this treasure came into my possession, having been entrusted to me for a few hours only, and for the joke of the thing (many a more innocent man than myself has returned from the Jeziden district with his locks shorn), I fortunately had with me a small photographic outfit, and copied, as quietly as possible, the book, page for page. Fortunately every shot was a success (ferrotypes). Now I am in condition to translate the Jeziden bible from Arabic into German."

The following is from the Political Tages-blatter: "A Parisian photographer, Pierre Petit, fils, has introduced a novelty which bids fair to meet with the high favor of the fair sex of his city. If a pretty dame is anxious to have her picture, she telegraphs to Mons. Petit, and in the course of an hour the photographer is in condition to begin the interesting operation. Photography a domicil is at present all the rage in the high circles of Paris, and ladies who consider it a bore to visit the gallery of the

photographer are hence waited upon by the obliging operator at their own residences. Although we are well aware that Mons. Petit can beat his own drum to perfection, vet we know that with the aid of modern dry plates that photography a domicil is a possibility. This new application is, no doubt, a convenience, but the tables are turned. Hitherto the public was obliged to wait upon the photographer. Now the photographer must wait upon the public. This is something noble, something grand! Now can the photographer aspire to the high dignity of the carpenter or the paperhanger! But this application has its drawbacks. There are dwellings so situated as not to afford even light enough to make the products of any value."

Whether photography shall be elevated by this association is a doubtful question.

H. W. VOGEL.

BERLIN, May 31, 1884.

METALLIC CASES FOR DEVELOP-ING AND OTHER PHOTOGRA-PHIC SOLUTIONS.

Some time ago we called the attention of our readers to a very neat invention, which we believed would prove of great service to have, namely, metallic cases drawn from solid metal, and supplied with a lock-joint arranged for the complete protection of bottles containing liquids when travelling. These cases are made of a variety of sorts, for bottles of one, two, four, and eight ounces measure. Each case is made adjustable to bottles of different lengths, and is a perfect protection against breakage. They are double-plated in nickel and gold, and handsomely finished. For the travelling photographer, they are indispensable. (A full description can be found in the June number of this magazine, p. 168.) amateur, especially, will find them of great service to him in carrying the solutions during the coming season. They are very light, and the corrugations make them strong. They can be packed in any position. They are made of drawn metal, of even thickness throughout, by machinery which has a weight of thirty thousand pounds. An extra advantage to the photographer has recently been added at our suggestion, namely, a graduated glass, which fits in the case. These cases are now supplied by all the dealers in the market. Scovill Manufacturing Company, New York, are the trade agents.

PERTAINING TO THE



HITCH YOUR HORSES AND COME IN.

True friendliness and hospitality are here expressed. With all the heartiness of the honest farmer or the frontiersman, for friend or stranger, the management of the P. A. of A. bids the photographer, whether great or small, prominent or obscure, WELCOME to the Cincinnati meeting. Much has been done in preparation for a grand success, and nothing short of that figure will do.

Members should promptly remit two dollars to pay their dues. Merchants and manufacturers of photographic goods, who believe in encouraging progress and are friendly to the "boys," should send their check to the treasurer, W. A. Armstrong, 389 Broadway, Milwaukee, Wis.

Respectfully, J. F. RYDER, of Executive Committee.

ONWARD TO CINCINNATI AND THE PHOTOGRAPHERS' CONVENTION, JULY 29, 1884.

As the coming Convention will include one of the finest exhibitions that has ever been held, it is the duty of every photographer who loves the art to lay aside his work, and not only try, but to induce his brother photographers also to come. We have received so many applications for photographic exhibits that it is with pleasure we announce that the fraternity is awake,

and will make Cincinnati feel proud of the Convention. Even the Exposition Commissioners are up in arms, and will try to induce the fraternity to leave their specimens of work for the Exposition.

The skylight under which these demonstrations will take place is situated in the Horticultural Department, and the Exposition Commissioners will have this department in first-class order, and with its beautiful cascade and fountains it will be a splendid place to take a number of views. To the right of the platform will be the meeting-room, where chairs will be provided so that you can have an elegant view of everything that is transpiring on the platform. There will be abundant room for everybody, so that all can see. Having worked hard for its success, it is with pride that I call your attention to this grand exhibition of art. From the reports we receive daily it is believed that it will eclipse any of the former exhibitions. Now, my friends, don't stay at home, for is it not for your benefit that we are working? Let us come together and try to cast all jealous feeling aside. Work together with a will, and the day will come when the fraternity will feel proud of their work, and have a better feeling for their fellow-beings. Those who intend to exhibit will please not forget to have their goods marked in plain letters, and the name on the reverse side of lid. In all cases have the goods prepaid; have them sent to Leo Weingartner, Secretary, care of Music Hall, Cincinnati, Ohio.

There will be abundant space for all. All wanting railroad certificates should address the Secretary for them. Now, for the last time, don't fail to come. Hoping to see you all at the largest exhibition ever held, I remain Yours fraternally,

LEO WEINGARTNER, Secretary of P. A. of A.

OUR PICTURE.

OUR picture this month is another example of the excellent work which comes from the studio of Mr. G. Cramer, St. Louis, Mo. There are but few of our photographers, we are sorry to say, who attempt such subjects. They ought to be

much more popular. It is true that the demand is but meagre, but if it were known that artists were able to produce such beautiful pictures, as well as such good photographs as this, the demand would soon grow. This picture has been entitled "Gretchen." The scene is one of domestic comfort and homeliness, and is so well depicted by the picture itself that it needs no description. It reminds us of a scene in "Cinderella," and yet it is of such a nature as can be found in almost any German peasant home. The fair maiden is here with all her beauty and loveliness, alone with her pets, resting, perhaps, from her household duties, while she sports, innocent of the emotion she may be causing in the hearts of half a dozen lovers in the neighborhood, and caring, perhaps, less. Ah! who can tell what is in a maiden's heart? It may be, that if we could place our ear at the door of this humble apartment, we should hear her singing in monotone the sweet words of Schiller:

"Fare thee well, fare thee well my dove!
Thou and I must sever;
One fond kiss, one fond kiss of love,
Ere we part forever."

At the same time outside of the little door we might hear one of the smitten lovers humming to himself:

"Dear little maiden with the flaxen bair,
Thou knowest me fond as thou art fair. [tree.
I go. Rude winds are whistling through the
Wilt let me share my but with thee?"

The whole conception is a very beautiful one indeed, and has been admirably managed by the skilful photographer. The Cramer plates were, of course, used for the purpose, and with excellent effect. Mr. Cramer's developer has been given often, but since he has recently modified it we add a few portions of his formula which may be useful in connection with his picture.

Pyro and sal-soda developer can be recommended as superior to other formulæ previously published. Prepare:

Pyro Stock Solution.

Water, 6 ounces.
Sulphuric Acid c. p., . . . 10 minims.
Pyrogallic Acid, . . . 1 ounce.

Soda Stock Solution.

Water,					30	ounces.
Sulphite	of	Soda,	gran	ular,	4	66
Sal Soda,					4	66

The sulphite of soda and the stock solutions must be kept in well-stoppered bottles.

Developer.

To one ounce of soda stock solution add seven ounces of water, and from one-quarter to one-half ounce of pyro stock solution (according to the degree of intensity desired, which is governed by the amount of pyro used); three-eighths ounce (3 fluid-drachms) will probably suit best. If plates work intense, use less pyro stock solution; if they come thin, use more.

The developer can be used for several plates in succession, as long as it remains clear. A sufficient quantity for one day's work may be mixed at once in the morning, but same stock should not be used next day any more. Stock solutions save the trouble of frequent weighing, but the developer may also be mixed ready for immediate use as follows:

Water, .					10	ounces.
Sulphite of	Soda,	granu	ılar,		80	grains.
Sal Soda, .					80	66
Pyrogallic .	Acid,		. al	bout	40	61

Pyro varying from twenty-five to fifty grains, according to the degree of intensity desired.

Watch the development of the negative carefully and examine the intensity by taking it out of the solution and looking through for a moment.

Develop until the lights are dense enough, and the details in shadows are fully brought out.

This is easily accomplished if the time of exposure was correct. Counting from the moment the developer is poured on the plate, it will generally take about half a minute before the image appears; all the detail in shadows should be completely brought out in two minutes, and in about three minutes the lights should have attained sufficient intensity.

The prints were made at our studio on the paper imported for us by Mr. G. Gennert, of New York.

AS TO THE "METEOR" PHOTO-GRAPH AGAIN.

DEAR SIR: The journal for this month is received, and as usual is full of good things, but of course my interest naturally centres about the moonlight view article.

I am much interested in the gentlemen's remarks, although they may not be altogether favorable to my opinion, and the last gentleman quoted would even insinuate as to the veracity of the photographer who made the view, at the same time giving him great credit as a skilful manipulator of the "knife."

I would be pleased to see a negative worked up in the manner he describes, so as to give as perfect a result without showing the work, and as to his doubts about its being an actual moonlight view, I can get a number of affidavits from persons who saw me making the exposure. I am certain that I am not so anxious for fame as to attempt to secure it by false representations. I only wish, though, that I was as positive of the meteor as of the fact that I have a moonlight view.

It is not my first attempt at making moonlight pictures since the introduction of the gelatine plate. I made one exposure during the winter of 1881, and secured a fair negative, but fogged one end of the plate in carelessly closing the slide, and allowing one end of the plate to be exposed to the moonlight in descending from the housetop. Then, on March 2, 1882, I made another with better results, and the last one of January 12th, the best, with the accident of what I think is a falling meteor thrown in. I appreciate the candid remarks of Prof. Smyth, of Scotland, but am sorry that he speaks of stars, since no claim had been made to that effect. I am positive that none were visible, and what he takes to be false representations of stars are simply a few pinholes spotted out, and the only work done on the negative.

I would only desire that the negative might have been some benefit to science aside from its being a wonderful effect.

> Yours fraternally, CHARES E. EMERY.

SILVER CLIFF, COL.

HOME AND ABROAD.

Mr. L. MEYER publishes a simple and easy method for bronzing iron. This may be useful to photographers to protect the parts of their appliances that are made of iron. The articles, thoroughly cleansed, are exposed to the vapors of a mixture of nitric and hydrochloric acids, heated between 300° and 350° C. (572° to 662° F.) until the bronze color makes its appearance. When cold they are rubbed with vaseline and again heated until this substance commences to decompose. When cold the operation is repeated. The shade may be modified by varying the proportion of the acids and by adding others—acetic acid, etc.

It was shown that iron bars that had been thus treated, had resisted for ten minutes exposure to acid and other vapors, without showing any change.

It is with regret that we have to announce the death of the distinguished optician John Henry Dallmeyer, of London, who died at sea, on the coast of New Zealand, during a voyage that he had undertaken for the benefit of his health, aged fifty-three years. It has been said of him that he did more to reconcile theoretical and practical optics than any other scientist of his generation. Since three years, Mr. Dallmeyer has been obliged to abandon his useful labors to his son Mr. Thomas Dallmeyer, who continues the direction of the establishment in Bloomsburgh Street.

At the last meeting of the London Photographic Society, Mr. Addenbrooke showed a lantern made of pasteboard and bookbinders' muslin, very light, with red glass, and lighted by a candle. He recommended this little appliance as very useful in travelling. Mr. Debenham remarked that, the light being red, it would be apt to injure the eyes, which would not be the case if a combination of green and yellow light was used.

Editor's Table.

THE STAMP PORTRAIT .- We are free to say that the first stamp portraits that came to us were from Mr. C. H. TONNDORFF, 1546 Chateau Avenue, St Louis, Mo., and, so far as our knowledge goes, he was the first to make them. Mr. TONNDORFF writes us a letter of regret at the blunder in connecting his name with Mr. GENEL-LI's last month. He says, for some years he has had no connection with that firm, but is alone. Not only this, he says that he has been one who has always maintained his prices, and given the trade a better opportunity of making money on stamp portraits than any one else. There is no reason in the world why these little novelties should be reduced in price, since they are low enough at the highest. Mr. Tonnborff gives a quality, too, which cannot be excelled. He says, " I am not one of those to put down prices, and have dissolved partnership twice on that account, because my partners were going into cheap work. I trust you will make this matter right before the trade and call their attention to the fact that it is to their interest to purchase stamp portraits of first quality, and to get the best price, for any one with half a head can

see that a trade profit on a dollar and a half per hundred is much better than the same percentage on seventy-five cents. It is, therefore, to the mutual interest of all to keep the price up." Read Mr. Tonndorff's advertisement in the proper place, and send to him or one of his agents for his list of prices.

OUR types made us blunder in our last issue in connecting the names of Messrs. General and TONNDORFF, of St. Louis, with reference to stamp portraits. These gentlemen both assure us that they have no business connection whatever, and moreover the Messrs. Genelli desire us to say that they produce stamps at the rate given in our last notice, as follows, for the trade only: from thirty-seven and a half to seventy-five cents per hundred, according to quantity. They also call attention again to the fact that they have patents pending on the only camera ever made which will make thirty-five negatives at one exposure on a 5 x 8 plate. They claim that their stamp trade is over ten thousand per day, and that they have also imported a beautiful stamp

THE AIR-BRUSH .- The hundreds of photographers and artists who saw the Air-brush at Milwaukee, and others who have had their curiosity aroused, will be glad to know that this great helper in photography will be exhibited at the Cincinnati Convention, together with a large display of work. The AIR-BRUSH MANUFACT-URING COMPANY assure us that every pains will be taken to enlighten the art-world regarding this most wonderful tool. We are informed, also, that the Company will execute a portrait head of small size for members of the Association who desire it, provided they bring their own prints on plain paper for the purpose. A light print is preferred. It gives us pleasure to call attention again to this most useful article, and to this splendid offer.

HUMAN NATURE UNDER THE SKYLIGHT.—This is the title of a very entertaining lecture lately given at the High School Building, Freeport, Ill., by our friend and subscriber, Mr. Samuel V. Allen. We hope the authorities of the P. A. of A. will induce Mr. Allen to repeat it at Cincinnati.

A SUBSTITUTE FOR GLASS FOR NEGATIVES .-There has been a good deal said about a substitute for glass for negative purposes, and the question is discussed in our issue this month. We also print an article bearing on the subject, from the British Journal of Photography, in order that our readers may discuss the thing in their minds intelligently. The question is, Is a flexible negative a thing so much to be desired after all? There are difficulties in the way of producing it properly. There are difficulties in its use also. We have seen a good deal of it in France, of a kind, but never have been sufficiently impressed with its advantages to advocate it in this country. However, we are open to conviction.

AN ENTERPRISING STOCKDEALER.—Mr. H. A. HYATT, 411 N. Fourth Street, St. Louis, Mo., is one of the most enterprising dealers of the West, and will be on hand at the Cincinnati Convention. Mr. HYATT is giving special attention to his agency for the Western Interior Decorating Company, and will have some magnificient specimens on exhibition. Last year these backgrounds and accessories created quite a consternation at Milwaukee, and this year, though they will not be such a great surprise, at the same time they will attract attention. We wish this enterprising dealer all success, since he is in-

dustrious in providing for the real wants of the fraternity.

MR. GEORGE W. KIRK, of Huntington, W. Va., issues a circular urging his patrons to attend the P. A. of A. Convention, which we are glad to see. It is a token of enterprise. As announced before, Mr. KIRK has secured with the Chesapeake and Ohio Railroad Company an arrangement which will make one fare for the round trip. Tickets may be obtained by application to Mr. Frank Trigg, 513 Pennsylvania Avenue, Washington, D. C., or Mr. H. W. Field, G. P. A., Richmond, Va. A reduced rate will also be made from New York by way of the Old Dominion Line of steamers, by applying to Mr. H. W. Carr, 339 Broadway, New York.

THE SUTTER LENS. -We have seen some remarkable pictures made by the new Swiss lenses of SUTTER, for which Messrs. Allen Brothers, Detroit, Mich., are the American agents. Their wonderful softness, sharpness, and general beauty is something remarkable. Moreover, their low prices in comparison with the work they do, is sure to make a great demand for them. See both work and lenses at the Cincinnati Exhibition. They are the novelty of the day.

Messrs. Willis & Clements, proprietors of the Platinotype, 25 N. Seventh Street, Philadelphia, have been compelled to issue a circular calling attention to a statement made in The Photographer at Chicago, that Mr. T. H. McCollin's advertisement as to the Willis's Platinum Printing Process offer, is misleading. Messrs. WILLIS & CLEMENTS say that Mr. T. H. McCollin does not control the platinum process in the United States, and never has done so for a moment. He has been agent for the sale of materials, nothing more, and is now a licensee only, the same as hundreds of others. If parties have received any circular or any information whatever, bearing upon his connection with the platinum process, or advising them what they can do with the process, the patentees will be greatly obliged if such will favor them with either the original matter or a copy of it. They say: "We are the proprietors of all the patents, and our only general agents for the sale of platinotype materials in the United States are Messrs. Buchanan, SMEDLEY & BROMLEY, whose address is the same as our own. The publication of the process does not of course affect the patent, and if those who desire to work this special process are to work it well, they will, of course, purchase their materials where they know them to be right, and so we recommend the inventors and patentees. It is easy to see why these complications should occur when we understand that the firm of BUCHANAN, SMEDLEY & BROMLEY was largely a secession from the house of Mr. T. H. McCollin.

During a recent visit to Mr. Henry Rocher, the veteran artist and photographer, of Chicago, we were assured that he had been wronged (not wilfully) by Mr. W. F. Van Loo when the latter gentleman classed him with the parties who had reduced their prices. Mr. Rocher says that he maintains his prices and the quality of his work as well, and has never given any cause for classing him with the "cut price" fraternity. We regret that any such intimation should have been printed in in our pages, knowing full well how much more than anybody else Mr. Rocher has done for the advancement of photography in America.

Excursion from Chicago to Cincinnati and Return.—For the round trip ten dollars. Messrs. Douglass, Thompson & Co., 229 & 231 State Street, Chicago, Ill., announce that they have made arrangements for photographers attending the Cincinnati Convention, for an excursion and special train, leaving Chicago Monday aftermoon, July 23d, at the above fare. Remittances should be sent to them at once to secure this privilege. The excursion will undoubtedly be a grand one.

CARBUTT'S KEYSTONE DRY-PLATE FACTORY is temporarily located at the northeast corner of Tenth and Filbert Streets, Philadelphia; only, however, until Mr. CARBUTT'S new and splendid factory at Wayne Junction is completed. Due notice will be given of the removal, and a description of the factory in good time. Mr. CARBUTT'S pyro and potash developer is printed in circular form, and supplied to photographers free.

BLACK JAPANNED TRAYS.—SCOVILL MANUFACTURING COMPANY announce a complete assortment of these, made of extra heavy iron and japanned in a superior manner. These goods are becoming more and more popular.

PRIZE.—Do not forget to read the fourth page of our cover this month—the prize offer of Mr. G. CRAMER for the best groups of negatives on his plates at the Cincinnati Exhibition. With such a splendid chance to make money and to

gain honor, surely photographers will give this competition fair attention, and compete largely. We should be very sorry to see the effort made without any result, since Mr. CRAMER is so liberal. Notice particularly the conditions of the prize, and let the competition be generous.

LECTURES BY MR. WILSON.—MR. EDWARD L. WILSON will give illustrated lectures as follows: Egypt and the Egyptians, The Taking of Petra, and Picturesque Palestine, at Island Park Assembly, Rome City, Ind., on July 25, 26, and 28. The same at Monona Lake Assembly, Madison, Wis., August 4, 5, aud 6. Others to follow.

Another Prize Offer.—Mr. James Inglis, of Rochester, N. Y., also offers a great inducement to photographers to be lively in the production of good work upon his plates. His advertisement will be found inside, and should not be overlooked. The offer is bona fide. The Committee will consist of disinterested gentlemen appointed by the Convention, and the awards will be made carefully and conscientiously. We hope that this competition will also be generous, because great good grows out of these prize competitions provided they are entered into with the right spirit.

A NEW Book .- Amateur Photography. practical instructor in the new recreation, by D. J. TAPLEY, Esq. New York: S. W. GREEN'S Son, 69 Beekman Street, Publishers. Price, cloth, \$1.00; paper, 50 cents. This is an admirable little manual written with due appreciation of the ignorance of the beginner, in a style that is pleasant, attractive, and fascinating. It will find its place among those who are interested in this all-important subject. It is profusely illustrated with diagrams and cuts, which are used upon a rather new plan. The book is full of good ideas and acceptable ones too, because the author is a most enthusiastic and successful amateur, thoroughly acquainted with the subject, knows well, apparently, the obstacles that lie in the path of the beginner, and has proven himself eminently qualified to point the way to success. His book is bright, and will prove very readable. It is sure to have success.

THOSE army correspondents at the battle of Tamanieb, who plied their revolvers with one hand, and their pencils with the other, should be able to send rattling reports home to their papers. All that was needed to cap the climax of journalistic enterprise was a photographer exposing a dry-plate negative at each crack of the pistol.

ITEMS OF NEWS .- The San Francisco Call, of February 7th, devotes nearly a column and a half to "Sun Pictures; or Modern Photography as described by an Expert." The article is well written, and such articles we are always glad to see because they help to push forward blessed photography. Mr. E. W. Fellows, of Cleveland, Ohio, continues to experiment with his invention for taking prints by electricity, and more developments are expected before very long. The Chicago Amateur Photographers' Club have sent us a copy of their Constitution and By-Laws, etc. The Massachusetts Charitable Mechanic Association will hold its Fifteenth Exhibition, opening September, 1884, and continue about ten weeks. For particulars, address Box 2361, Boston, Mass. The china wedding of Mr. and Mrs. Henry G. Thompson was held at their residence, 98 Winchester Avenue, Chicago, Ill. during last month, at which a large company was present to add to the happiness of the occasion. Mr. Thompson, it will be remembered, is of the well-known firm of Douglass, Thompson & Co., and we congratulate him on his twentieth anniversary. Mr. GEORGE H. KIRK, of Huntington, Va., has made arrangements for the conveyance of delegates to the Convention at Cincinnati. We hope others have done the same thing, and will report the whole together in an early number of our magazine. The Lowell Amateur Photographic Association has been organized with the following officers: President, F. H. PULLEN; Vice-President, R. G. WALSH; Secretary, R. T. HEMENWAY. Nearly twenty amateur photographers were present at the organization.

THE P. A. of A. proceedings will be carefully reported personally for our pages. We expect to make it concise and the best of all.

SCOVILL'S NOVELTIES.—SCOVILL MANUFACTURING Co. announce in their latest circulars the Hanover Retouchers for negative work, and also the fact that they have introduced three new dry-plate outfits for the season of 1884, namely, 601, 602, and 603. Send for circular.

A NEW STUDIO IN PHOTOGRAPHY.—Mr. WM. CURTIS TAYLOR, well known for a long time to our readers as a contributor to photographic literature, and late of the firm of WENDEROTH & TAYLOR, and TAYLOR & BROWN, in this city, has

opened a new studio at 1328 Chestnut Street, where, under the most favorable conditions, he hopes to uphold the honor of photography, and to do a prosperous business. Mr. G. H. CROUGHTON, the celebrated English artist, will do the colored work for Mr. TAYLOR, and is introducing a new specialty, namely, painting on ivory. Splendid success to the new firm, say we.

Good Words.—Mr. John C. Patrick, of Batavia, N. Y., says, "I think if the first chapter of your *Photographics* could be studied by art students it would be a valuable help to them." Mr. Frank E. Cook, of Owosso, Mich., says, "I think your magazine is worth double the amount invested." Mr. John K. Miller, of Elizabethtown, Pa., says, "I am trying to rise to the top of the ladder, and your magazine gives me a good push." Messrs. Abell & Son, Portland, Oregon, writes, "Your valuable publication is a credit to you, and more than interesting."

The "phunny" man of the New York Times has concluded very wisely that "the real cause of the increase of insanity here and abroad in the last two years, is photography." We presume that he might add that the most of the victims are from the amateur ranks, over which some of our practical men are wicked enough and ignorant enough to rejoice, and some, we suppose, will fear that the whole thing is a grim joke.

A SPLENDID CATALOGUE .- Mr. H. A. HYATT, 411 N. Fourth Street, St. Louis, Mo., favor us with a copy of his splendid catalogue of one hundred and ninety-two royal octavo pages, illustrated most elaborately, and supplied with descriptions of all sorts of articles required by the photographer in the manufacture of his work, and for its elaboration in the homes for which it is intended. Mr. HYATT deserves the greatest credit for his patience in producing such a catalogue as this. Personally we well understand the labor of such work, and are able to congratulate him on his success. A full list of books is given by Mr. HYATT, which covers fully two pages. All who contemplate being posted up in their business should send for this splendid catalogue.

Scovill Registering Slides.—Scovill Manufacturing Company, have introduced a novelty which will be found to be very acceptable to all, namely, a plate-holder whose slides are covered with silicate so that the photographer can record with lead-pencil his exposure upon

the slides, and afterwards erase without injury to them. This will be found a real advantage.

A DESERVED TESTIMONIAL.—Mr. J. H. SMITH, formerly of Quincy, Ill., and now of the firm of SMITH & PATTISON, Chicago, Ill., received a very handsome testimonial, before departing from Quincy, from a number of his fellow-citizens. Mr. SMITH, is a public-spirited citizen and well-esteemed gentlemen, and this testimonial must have been very gratifying to our old friend.

No. 13.—This is the number given by Mr. Osborne to his new background and accessory combination. It is a very unique thing, and is for summer use particularly. It consists of a gateway which really opens and closes, with vines and festconery about it with the latticedwork window, and, greatest novelty of all, an attachment which consists of the floor background, if we may use the expression, representing the steps which lead down with excellent perspective from the above-named gateway toward the camera. The delusion is perfect, and the effect in the picture, as we know from studies we have of it, is admirable. Mr. Osborne is a genius in his particular line.

Testimonial.—Mr. W. O. Matzger, Dayton, Washington, Ty., says "I flatter myself that I have the best photographic library in either Oregon or Washington Territory. It contains the *Philadelphia Photographer* from the first of the year 1875 to date, *Mosaics* from 1875 to 1884 inclusive, besides a number of other books of minor importance." A good example is this given by a far distant photographer.

MR. FRANKLIN B. Hough, Counsellor at Law and Solictor of American and Foreign Patents, has our thanks for notes concerning recently obtained photographic patents. We wish we had space to print these lists, but anybody desiring a copy of photographic patents can obtain it of Mr. Hough by writing him and remitting twenty-five cents for each copy.

Some Marvellous Pictures.—Mr. I. W. Taber, San Francisco, Cal., has favored us with a large batch of very remarkable photographs made upon dry plates manufactured by Messrs. Taber & Ruthnick. The first series is of animals in motion. These give us remarkable evidence of the rapid improvement made in instantaneous dry plates of late. These pictures have been so admirably exposed as to give the full

detail of the animals while at the highest rate of speed. If Mr. MUYBRIDGE could have such plates with which to continue his work in the line so peculiarly his own, photographically his pictures would be far superior to those we have seen made by him. The second series of Mr. TABER is of a number of views of Kiralfy Bros.'s spectacular play "Excelsior," photographed by means of electric light. These are very successful also, though better effects could have been had if a little more study had been given to the disposition of the light. The groupings are fine, and the photography is also something remarkable. The third and best series of all is of some marine views, which show more vividly than anything else the wondrous quality of the plates from which these photographs were made. A view of the beach at Cliff House we think is the most remarkable water-picture we have ever seen. A breaker is caught just as it has fallen upon the rocky beach, with most wondrous detail, graded from the soft, filmy, cloud-like spray to the rich and round half-tone secured by iceeffects. One can see into the shadows back of the wave-curl. There are a dozen different qualities of water in this one picture. Some views of the Bay of San Francisco full of vessels are also remarkable, but none equal to that of the steamer "Mariposa," under full sail, seaward. Her name upon her flag and side, are sharp, while the stars and stripes floating at her bow is perfect, though fluttering in the breeze. The natural clouds, the smoke from the stacks of the vessel, the distant ship under full sail, water and all, give us an effect that seems like that of magic, and would be most difficult to understand were we not already learning to believe that with photography all things are possible. No. B, 877, of the steam tug "Hercules," is also a remarkable picture, showing the wake of the vessels at the stern, the group of camera-gazing creatures on deck, the flag, and dense clouds of smoke from the stack, and so on, making the picture full of glow, go, and photographic excellence. Such effects make us frantic to leave our desk, with camera in hand, to go out into the world and gather them in.

ART RECREATIONS.—A guide to decorative art, edited by Marion Kimble. Scould Manufacturing Company, Publishers. New York: Price, \$2.00 per copy. This little manual is intended to help make beautiful the homes into which it is introduced. It is sure to succeed wherever it goes, so carefully is it prepared, and so plainly is the reader made to understand its author's meaning. Its elaborate index is one of its best

features. Two chapters of the book are devoted to amateur photography, and following it are chapters on etching, drawing, painting in water-colors, painting on silk, velvet, tapestry, pottery decoration, painting on china and wax-work, etc. The ladies, especially, should read this little beauty.

BOOKS RECEIVED .- From ED. LIESEGANG, of Düsseldorf, Der Silber Druck und das Vergrosseren Photographischer Aufnahmen, by Dr. PAUL LIESEGANG; an exhaustive and very practical treatise on silver printing and solar enlarging. The information is conveyed in a clear and concise manner, and as none of the details of the process are omitted, it cannot fail to be of the highest value to the profession. Not only are the means of producing good prints given, but also all the faults and defects enumerated to which the process is subject, and the latest methods of preventing or remedying them. Also, by the same author, the eighth edition of Die Collodion Verfahren (Collodion Method); one of the most complete and practical works upon the subject, written in the characteristic exhaustive German style.

PICTURES RECEIVED.—From Mr. C. A. STACEY, Medina, N. Y., some very taking pictures of children, and some nice examples of animal work, those of cattle being particularly well done.

"IS'E RICH."-Messrs. STRAUSS BROS., St. Louis, Mo., have sent us a 16 x 20 character picture, which represents a bit of street life in St. Louis, hard to beat. The subject is a little negro boy, with clothes all tattered and torn, and mended to distraction, and toes out, seated upon a bucket, outside of a stable door, apparently, his head leaning against a post, and in one hand is his hat and in the other a silver dollar. Whether this be a "standard dollar" or not, we know not; but the animated expression of the boy, and the title given to the picture, lead us to believe that he is truly what he says, "rich." As a photographic work it is very successful. The plate was probably taken very quickly (emulsion), and has been developed for all it is worth. It does credit to the photographer who secured it.

A VOICE FROM NEW ZEALAND.—Mr. J. R. HANNA, one of our pleasant correspondents and subscribers in New Zealand, writes to us as follows: "During my rambles round the Colonies I was always on the lookout for something new

in photography, but failed to find any notions worth imitating. There was however, one great defect in most of the work that I saw exhibited, and this was more noticeable in the American studios than in any others. I allude to retouching. Now, sir, is it not provoking to see a fine picture, well lighted, position good, drapery nicely arranged, and, indeed, the composition as a whole all that could be desired, to find such a negative retouched to death? In fact, the whole of the character touched out, leaving the faces in many cases of middle-aged persons as smooth as that of a three year old child. I believe in a judicious use of the pencil; it is the abuse of the same that I complain of. There is no place where this is carried to such an extent as in your country. At least this is the conclusion that I have come to from a careful study of the various English, American, and Continental pictures that have come to my notice of late years. I think, therefore, that the time has come when you should raise your voice against this most ruinous practice, as there is nothing like a good wholesome criticism to remedy evils such as this one." We think the remarks of our correspondent very just. It is sometimes good to see ourselves as others see us. We have often raised our voice, etc.

P. A. of A.—We have to thank Messrs. P. SMITH & Co., of the old reliable stock-house in Cincinnati, for a copy of the announcement pamphlet of the Fifth Annual Convention of the Photographer's Association of America. Our readers will not forget that this great event is to occur in Music Hall, Cincinnati, opening July 29, and closing Friday afternoon, August 2d. For further particulars, please refer to the regular P. A. of A. column. This is the last time we will have the opportunity to urge our readers on this subject, and we hope they will give it heed. The Convention promises to be a great success.

THE Lambertype suit issued by Mr. Lillienthal against W. W. Washburn, Esq., of New Orleans, has been decided by Judge Pardee in favor of Mr. Lillienthal. The case has been long pending, owing to complications which arose from time to time.

CORRECTION.—In noticing the new establishment of Messrs. Hodge & Huston, last month, our types made us give their address at 25 N. Seventh Street. This, however, is not the fact. These enterprising gentlemen do their solar printing and enlarging by electric light at No 622 Arch Street, the old photographic centre, so

well known. Examples of their work that we have seen lately bespeak success for them.

THE Engraving Diamond noticed by us at length some time ago is winning testimonials continually. Mr. Frank Thomas, one of our old subscribers and contributors, says of it, "The diamond works like a charm. I am more than pleased with it." Prof. Charles F. Himes, the projector of the Summer School of Photography, also writes us as follows: "The diamond is very neatly and substantially put up, and writes more easily than the ordinary writing diamond." Personally, we have seen the work of this little tool, and can recommend it for all that is said about it. It can be carried in the vest pocket and protected when not in use, and works beautifully.

THE World's Industrial and Cotton Centennial Exposition at New Orleans is something that our fraternity must not overlook. It is to open some time in December, and will continue for about six months. It will rival in extent and interest the Centennial Exhibition of 1876, and in some respects will excel it in beauty. Of course, an immense art department will be organized, and every effort will be made by the management to secure a splendid exhibition of photography. Photographers who intend to exhibit should at once send for blank applications for space to SAMUEL MULLEN, Esq., Chief of Installation, New Orleans, La. The Southern Industrial Record, published at 205 Gravier St., New Orleans, gives full information on this subject. Monthly; \$1 a year.

A Portuguese photographic journal is the last visitor to our table. It is entitled, A' Arte Photographica. Two numbers of this magazine have reached us, both illustrated by beautiful examples of photography. We wish success to our new contemporary, and gladly add it to our exchange list. In size it is about the same as our own magazine. Its reading matter is excellent and abreast of the times.

MR. W. D. GATCHEL, 327 W. Jefferson St., Louisville, Ky., has favored us with a copy of his splendid catalogue, about the size of our magazine; it contains one hundred and twenty-four pages of the usual class of matter found in photographic catalogues, and shows great skill and taste in the getting up. Mr. Gatchel is one of our veteran stockdenlers, and is so well known in the West for honesty and probity that he needs no recommendation from

us. Buyers convenient to him cannot do better than to patronize him.

A CATALOGUE of photographs of works of art by the great masters, published by WILLIAM H. SHERMAN, Milwaukee, Wisconsin. Mr. Sherman's admirable articles in our pages on the subject of the works of the great masters, has been a revelation to some of us, so complete does his knowledge seem to be, and so familiar is he with these works, apparently. The cause is easily understood when we explain that for some years Mr. Sherman has been making an unrivalled collection of negatives of these beautiful studies from all parts of the world, and is now prepared to supply prints from them, a catalogue of which we have mentioned above. Photographers who are really earnest in their desire to improve their knowledge and to improve their work in the art direction, should consult this catalogue, and draw from the splendid opportunity which Mr. Sherman offers them. No other such will probably ever be given them.

Scovill Manufacturing Company have issued from their new store, 423 Broome Street, another edition of How to Make Photographs, to which is appended a descriptive price-list and catalogue of Scovill's Amateur Photographic Requisites. This little work is teeming with matter interesting to the amateur worker, and should be secured by all. It is sent free to any address.

"PICTURE-MAKING BY PHOTOGRAPHY," by H. P. ROBINSON, author of Pictorial Effect in Photography, etc., SCOVILL MANUFACTURING COMPANY, Publishers, 423 Broome St., New York.

This is a truly enjoyable book, as is every book by Mr. H. P. Robinson. There are few in our art who excel him as artist and artist photographer. This little work is full of original and fresh matter, and the subjects of composition, light and shade, work in the field, what to photograph, models, the genesis of a picture, the origin of ideas, subjects, what is a landscape, figures and landscape, effect of light, sunshine, on sea and shore, the sky, animals, old Clo', picture-making by photography, strong and weak points of the picture, and the conclusion, make it a most enjoyable and readable book, sugar-coating an amount of knowledge and information which is simply remarkable. It is illustrated by a large number of woodcuts and several ink photos from Mr. Robinson's pictures. Better studies of these latter have appeared in our own magazine, in the mosaic which we made up of Mr. Robinson's works some time ago.

Specialties.

MAKE OUT YOUR OWN BILL, and remit cash with your advertisements, or they will not be inserted.

ADVERTISING RATES FOR SPECIALTIES.—Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations.

We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement. Postage-stamps taken.

We are now located in our four-story and basement, seventy feet deep building. We have a stock of summer accessories on hand, and can deliver backgrounds at short notice. Several new articles, very desirable for summer, ready.

LAFAYETTE W. SEAVEY. 216 E. Ninth St., N. Y.

W. F. ASHE, artistic backgrounds

AND

ACCESSORIES,

REMOVED TO 68 WEST FOURTH ST.,

4 BLOCKS WEST OF BROADWAY, N. Y.

My new studio is fitted up with all the modern improvements, and the most refined demands from a critical public can be satisfied. A visit to my establishment, which has the largest showroom, containing the greatest amount of stock of any place in the world, will be gratefully appreciated.

I have again added numerous new designs to my great variety of patterns for backgrounds and accessories, and keep also in stock a large quantity of goods for parties to select from, saving time and delay on orders.

FOR SALE IN THE BEST MINING CAMP IN AMERICA.—I have just received into my hands a good photographic outfit and full stock, which must be sold immediately. For particulars,

Address J. H. EARDLEY,

Grocer, Butte City,
Montana Ty.

ROCKWOOD SOLAR PRINTING CO.

17 Union Square, New York.

TIME.—It is our intention that every order received in the morning's mail (when not to be put on stretchers) shall leave this establishment the same day or the following morning. If too late for the morning work, it is sent on the second day. Having our own engine and electric light, we are not at all dependent on the weather.

GEORGE H. ROCKWOOD, Business Manager.

THE PLATINOTYPE PROCESS. NOTICE!

Thomas H. McCollin, of Philadelphia, is no longer agent for the sale of materials for

WILLIS'S PLATINOTYPE PROCESS.

Licensees, both amateur and professional, and all who are interested in the process, will please address all orders and communications to Willis & Clements, proprietors of the patents, or to Buchanan, Smedley & Bromley the only authorized general agents for the sale of materials in the United States, 25 North Seventh St., Philadelphia, Pa.

SEE French's new advertisement of Relief Borders and Foregrounds in this issue. A new Illustration.

VOGEL'S PROGRESS OF PHOTOGRAPHY, LATEST-BEST-\$3. WAYMOUTH'S

VIGNETTE PAPERS.

The old form of No.18, Waymouth's Vignette Papers, oval, has been discarded, and a new pear-shaped style is now ready in its place. It is a beautiful piece of gradation and prints perfectly. Price \$1.25 per dozen. For sale by all dealers. See advertisement for all sizes.

NOW READY.

S. G. NIXON.

PORTRAIT ARTIST,

No. 813 Arch Street, Philadelphia, Pa. CRAYON AND WATER COLOR PORTRAITS.

Solar prints and photographic enlargements furnished and finished in crayon, Indian ink, or water-colors. Photographic coloring on plain or albumenized paper and porcelain. Copies finsihed in Indian ink and water colors.

References and terms on application.



WILSON'S PHOTOGRAPHICS

Holds up to view all about manipulation, photographic art, posing, lighting, etc. Nearly 4000 sold. See advertisements and testimonials.

84.00

84.00

Address T. W. Power, N. Y., Secretary of Association of Operative Photographers of New York City, for operators, printers, and retouchers, 392 Bowery, or 487 Eighth Avenue.

1864

M. WERNER,

1884.

PORTRAIT ARTIST,

No. 102 N. TENTH STREET, PHILADELPHIA.

Photographs finished in crayon, India ink, water colors, and pastel, in all sizes, in the very best styles, and at moderate prices.

Solar Prints and Enlargements Furnished.

EVERY photographer in want of excellent lenses, for any purpose, will best serve his interest by consulting the new illustrated price-list of Messrs. Benjamin French & Co. before purchasing.

Notice of Removal.-Mrs. Clarke, Artist, late of 561 Druid Hill Avenue, Baltimore, begs to inform her friends and the photographic profession that she has removed to 2104 North 20th St., Philadelphia, Pa., where she will be happy to receive any commission for water-color painting. Terms, etc., on application to Mrs. Clarke, or to the office of the Philadelphia Photographer.

PORTRAITS IN CRAYON.

The new book by E. Long, on the art of making portraits in crayon on solar enlargements, covers the entire ground, and is sold for the low price of fifty cents. For sale by

EDWARD L. WILSON,

Philadelphia.

METAL GUIDES

FOR.

A. M. COLLINS, SON & CO.'S

No. 26 GILT BEVELLED-EDGE CARDS.

The fancy-shaped mounts now so fashionable among photographers, require metal guides with which to cut the photographs. They are now kept on hand, and can be supplied in the following shapes, and at the prices mentioned:

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1125 Chestnut Street. Philadelphia, Pa.

Vogel's Progress of Photography, LATEST-BEST-\$3.



The Fifth Annual Convention of the P. A. of A. opens July 29th, and continues until August 1st. It will be held at Music Hall, Cincinnati.

IT WILL BE A STUNNER.

The finest exhibition of dry plates ever known will be there.

The best methods and the highest skilled experts to demonstrate them will be there.

A THOUSAND PHOTOGRAPHERS WILL BE THERE.

The best opportunity ever offered for securing knowledge will be given.

Solid sociability will run high. Some fun will be had.

DON'T MISS THIS CHANCE-GO!

J. F. RYDER, Of Executive Committee.

Wanted.—A first-class printer and toner in a first-class gallery. Fifteen years' experience. Best reference given. Address

CARL VON MOELKE,

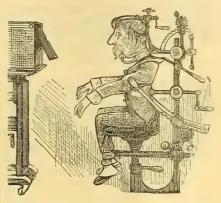
Care Robert Dempster,

Quincy, Ill.

A First-class gallery for sale in town of 20,000 inhabitants; on Hudson River. For particulars address Photographer,

396 Fourth Av., New York.

VOGEL'S PROGRESS OF PHOTOGRAPHY, LATEST-BEST-\$3.



Don't do that any longer. Get Schindler's Picturesque and Easy-posing Chair. Send for prints and lists to the factory, West Hoboken, N. J. Our photographic studio furniture is a leading specialty, unequalled in usefulness, quality, and cheapness. For sale by all dealers.

Genelli, of St. Louis, is making the best stamps we ever saw for the trade, at $37\frac{1}{2}$ to 75 cents per one hundred according to quantity, and how he can do it at a profit is an enigma. He has patents pending on the only camera ever made which will make thirty-five perfect negatives at one exposure on a 5×8 plate. His stamp trade is over 10,000 per day. He has also copyrighted a beautiful stamp album.

FOR SALE.—At a bargain, one of the finest and most thoroughly equipped galleries in Ohio. Dallmyer and Euryscope lenses, A. O. Royal camera-boxes, fine Seavey backgrounds and accessories, etc. It is situated in a pleasant town of 8000 inhabitants, with a very weathy surrounding country, and is the best reputed gallery in this section. It is doing a fine business; last year's receipts amounted to about \$4000. Will sell for \$2000; \$1000 cash, balance on time. Gallery will invoice \$2500. Fine living-rooms connected with the gallery. Only those meaning business need address

EGAN & HEINIG,

Urbana, Ohio.

Wanted.—To purchase a good gallery for cash. One where first-class work only is done. In a town of not less than 15,000 population. Address, with particulars regarding prices, location, light, rent, etc.,

A VIGNETTER,

care Edward L. Wilson, 1125 Chestnut St., Phila. TAKE your 5 x 8 cameras to the Convention, and test the "Reliable I. C. Plates. A commodious developing-room and plates free.

Your truly,
Iowa City Dry Plate Co.

GLASS-BOTTOM developing-trays, made of black walnut, lined with a chemical-proof substance, with chamber at one end to inspect development. For plates $\frac{1}{4}$ and $4\frac{1}{4} \times 6\frac{1}{3}$, 50 cents each; 5 x 8 and 4-4, 75 cents; 8 x 10, \$1.00; 11 x 14, \$1.75; 14 x 17, \$2.00. Chambers made either length wise or crosswise. Address

W. L. CHAMPLIN, Whitestown, N. Y.

ALL departments of our large new studio are in good working condition—orders are being promptly filled. Visitors will find a large stock on hand for selection; several novelties. Do not wait for the Convention for summer backgrounds and accessories.

LAFAYETTE W. SEAVEY, 216 E. Ninth St., New York.

For SALE.—The finest arranged ground-floor gallery in America. The leading gallery in a city of one hundred thousand inhabitants. First-class prices for work. Average, from \$200 to \$350 per week. Cheapest rent known. Price, \$6000 cash, worth double. Satisfactory reason given for selling. Address J. L.,

care E. L. Wilson, Phila.

Vogel's Progress of Photography, LATEST-BEST-\$3.



WILSON'S PHOTOGRAPHICS

Teaches every step in Photography.

\$4.00 To any Address. \$4.00

THE NEW RECREATION.

Amateur Photography.

By D. J. TAPLEY.

Containing full and explicit instructions, by following which any person of fair intelligence will become a successful photographer. It is pleasantly written, popular in style, and free from technicalities.

"Mr. Tapley has written a bright, breezy, and amusing book, practical and simple in its instructions. It will doubtless make hosts of new devotees to this charming out-door recreation."

PROFUSELY ILLUSTRATED.

Paper, 50 cents. Cloth, \$1. Post-paid.

S. W. GREEN'S SON, Publisher, 69 Beekman St., New York.

For sale by all Booksellers and Newsmen.

PRINTING FOR AMATEURS
BY THE

PLATINOTYPE PROCESS.

Instructions given in developing negatives, intensification of negatives, platinotype printing, etc. Printing price-list on application to

WILLIS & CLEMENTS,

25 N. Seventh St., Philadelphia. Pa.

SITUATIONS WANTED.

No charge for advertisements under this head; limited to four lines. Inserted once only, unless by request.

By a first-class retoucher. Address Photographer, 620 Wood Street, Philadelphia, Pa.

Permanently by a lady to retouch and attend reception-room. Address Jennie Leroy, Pittsburg P. O., Pa.

By a young lady to retouch and attend reception-room in a good gallery. Samples sent. Address M. Lowry, 134 Clinton St., Cleveland, O.

By an operator who can retouch and print. Can run gallery. Strictly temperate. Address "Photographer," care of L. E. Steinman, 119 S. Clark St., Chicago, Ill.

By a young man as printer and toner, or operator. Very fair retoucher. Wages not so much an object as a steady place where I can become good retoucher. Address E. R. Sherman, Franklinville, Cattaraugus Co., N. Y.

By a young man who has had over twenty years' experience in photographic printing and retouching. Address Edward Grove, Muncy, Pa.

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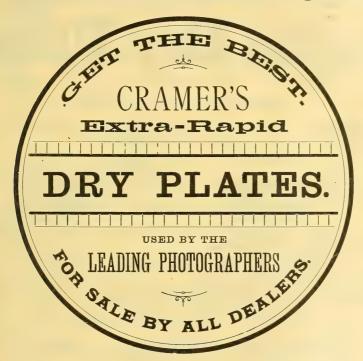
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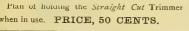
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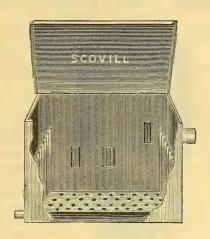
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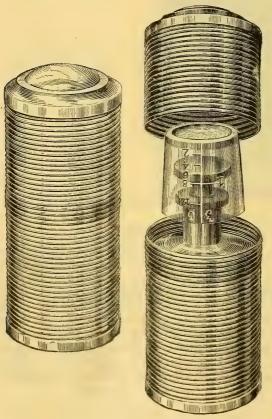
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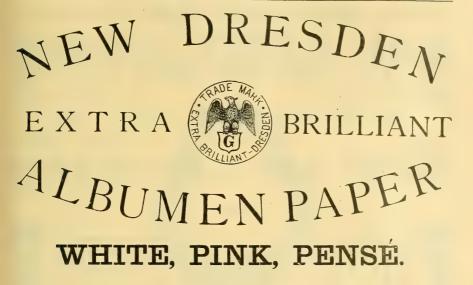
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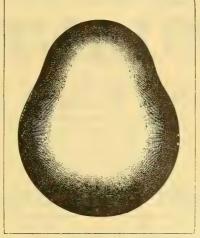
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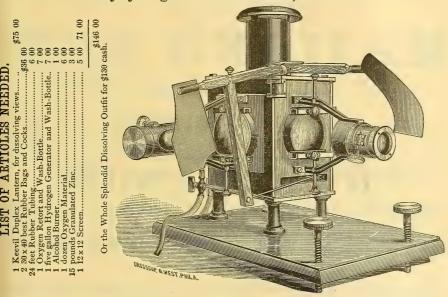
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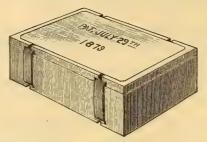
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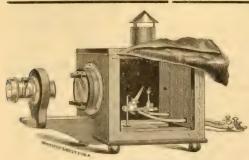
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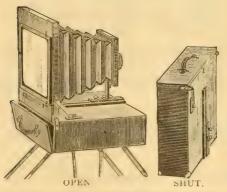
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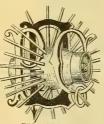
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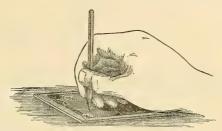
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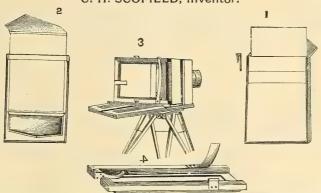
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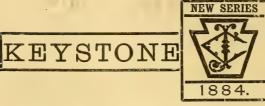
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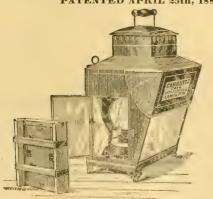
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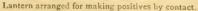
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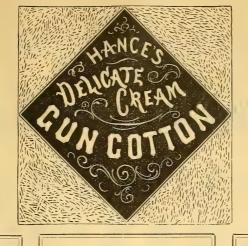
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Philadelphia Photographer.

EDITED BY EDWARD L. WILSON,

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AUGUST, 1884.

No. 248.

NOTICE!

THE office of the PHILADELPHIA PHOTOGRAPHER is removed to No. 1125 Chestnut Street.

The Annual Convention of the Photographers' Association of America opens in Cincinnati, July 29th You will miss a great deal if you are not there.

We issue our current number early that it may reach our readers before the Convention, for reasons seen further on. Read them all.

Our report of the Convention will be better than any other, but it may delay our September number a few days.

SCOVILL MANUFACTURING COM-PANY'S NEW WAREHOUSE.

A MODEL AND CONVENIENT ESTAB-LISHMENT.

WE knew of the building of the new photographic warehouse of the Scovill Manufacturing Company for some months back, and waited impatiently until its completion that we might inspect it, and post our readers fully as to such an important event as the opening of the largest stockhouse in the world. In due course of time we received the following:

"On the first day of May, 1884, we com-

pleted the removal of our stock of merchandise to our new warehouse, No. 423 Broome Street.

"This well-appointed structure, embracing seven floors and a double basement, we have erected to meet the special requirements of our business. This building, with its improved interior arrangements, will greatly enlarge our facilities, and enable us to respond to the wants of our patrons in a more expeditious manner than heretofore. For the accommodation of our friends, a well-constructed dark-room and skylight have been added to the many other conveniences introduced, all of which will subserve in various ways the interest of our customers.

"Thanking you for past favors, and soliciting you continued patronage, . .

"Very truly yours, "Scovill Manufacturing Co."

Accepting the above as a hint to come and see, we made the journey to New York, and what follows is, as near as we can narrate, a description of what we saw. The exterior architecture of the building is brick and iron decorated with red tile. It is very tasteful and artistic, and does credit to architect and builder. The pediment is surrounded by a splendid cornice, and magnificent display signs which notify the visitor long before he reaches Broome Street that the occupants are the well-known firm of Scovill Manufacturing Company. As

stated above, the structure is seven stories in height. The first floor is occupied by a branch of the business of Scovill Manufacturing Company which does not pertain to photography, namely, to the sale of sheet metal of various kinds, metal buttons, brass hardware in variety, and other articles made of brass at the manufactory of the Company at Waterbury, Conn. Each floor is one hundred and ten feet in depth, and connected with every other by two elevators-one at the rear for freight, and one near the centre of the store, for passengers. The latter is presided over by the veteran "Billy," who has been connected with the establishment some time, and who has been metamorphosed since we saw him by the application of a blue military suit, and by some of Scovill Manufacturing Company's best brass buttons. No wig had been purchased for "Billy," however. In obedience to his genial invitation, we removed our tile and was about removing our shoes, as was our habit on entering a mosque at any time in the East, but we were told by "Billy" that that was unnecessary. We therefore stepped lightly into the carpeted elevator, and in less time than is required to tell it, we were landed at the second Here the business of the photographic department begins. Here are sample cases; long lengths of counters; a huge chiffonniere for the reception of albumen paper of various kinds; a variety department where samples of all goods on the adjoining floors are kept, and where male and female attendants are ready to meet the wants of patrons, together with everything else to make a complete photographicsupply establishment. In the front of this floor are the counting-room, the private office of Mr. Adams the agent, and the various apartments used by his secretaries and assistants. This floor is supplied also with all the modern improvements in the line of electric calls, alarm whistles, and what not, to make access to the various other floors easy and quick. On this floor there are two fire-proofs, where lens stock is kept at night, and another where the treasury is established. A most singular and picturesque view is had from the rear of this floor, which is none less than

"a bit of old Naples," for lo! through the window we can see a bit of the Italian quarter of New York, resembling what one may observe from the quay at Naples. There are the tall-storied houses, whose back portions are opposite each other, and from one to the other are stretched lines upon which clothing is hung, while at every window is a balcony. It is a grand photographic subject for visitors when plates are to be tried, close at hand. We forgot to mention that a portion of this floor is also devoted to an extensive book-rack, where photographic books and magazines are constantly exposed, and where sales of these useful articles are made.

The next, or third floor, is devoted from one end to the other solely to apparatus. Here is undoubtedly the finest display of photographic apparatus to be found in any part of the world. Such a stock as is kept would appal a European dealer, and would excite the envy of any enthusiastic amateur or practical photographer. One side of the floor is lined with magnificent cases which would do justice to any international exhibition, filled with apparatus from the works of the American Optical Company, and from the factory of the Scovill Manufacturing Company, at New Haven. Nothing that we have ever seen approaches it. Here are sample lots of the various amateur outfits supplied by this concern, together with samples of the entire stock of everything in the apparatus line for use in or out of doors. This floor seemed to hold for us the most attraction, since one of our weak points has always been to own good apparatus. There is enough here to meet the desires of, and satisfy the most craving We reluctantly left it to go up higher, first, however, examining a second series of offices in the front portion of the third floor, where the various clerks whose time is occupied by these departments, are found when wanted. The fourth floor began to look more like solid business, or rather more like the shipping of goods than the selling thereof. Here are various desks for the entry clerks. Here, too, large orders were laid out; and different departments for the sale and storage of large cardboard, roll paper, the great variety of dry plates

now necessary for each dealer to have on hand, card stock in its infinite variety, sundries of various kinds, Waymouth's vignette papers, books in large variety, the wholesale stock in another immense chiffonniere of articles such as camel's-hair brushes, blenders, Robinson's trimmers, Opaque, guides, colors, and other similar wares too tedious to mention, but familiar to all our readers. We noticed on this floor what we afterwards observed on every floor, complete arrangements for fire, apparatus ready at any moment for use in case of necessity, a precaution well taken. Again stepping into the elevator, we were lifted instantly to the fifth floor. It seemed as though we were going through all the transformations of some practical fairyland, so very different is every floor from the one below. The ideal of Mr. Adams in arranging this establishment has been to make this branch of Scovill Manufacturing Company's properties one grand salesroom. Nothing is manufactured here. The factories are in Waterbury and New Haven, Conn., and in several places in New York, besides drafts being made from all parts of the world for the various articles sold. The practice of this ideal has resulted in making this new establishment "one magnificent salesroom," as was intended. The reserve is in the factories. An immense stock is kept here, which is drawn from every day. Now, we see shelved in all its variety and shapes and sizes, porcelain ware, glassware, agateware, and woodenware. Here, too, are immense piles of negative boxes of various sizes, negative washers, printing-frames, Japanned trays, and travelling-cases for amateur outfits, with immense piles reaching to the ceiling, on shelf and floor of all parts of this story. Another elevation, this time by one of the beautiful stairways, strong and wide, and we are standing upon the sixth floor. More than ever are we impressed with the amount of stock necessary to be carried by this immense concern. Below, we saw first the retail stock for city sales, then the well-laden shelves for wholesale orders, and now we see the unbroken cases fresh from the various factories, or from foreign parts-cases of albumen paper of various brands, hogsheads and cases of

glassware, immense boxes of gelatine, hundreds of boxes of glass, stacks of apparatus, dry plates in quantity uncountable, tons of ferrotype plates in unbroken packages as they came from the factories, an immense weight of head-rests, together with various other articles in their original packages as sent from the factories, ready for the first customer, or to replenish the shelves below. In the rear of this important floor are the packing-rooms and the department where all the goods are entered. After these necessary operations are ended, the freight elevator is put upon its reverse action, and the goods are lowered to the rear of the first floor of the establishment and are shipped to various parts of the world, as required. Is there no end to this? we asked, as our attendant blandly said to us, "Once more, and we are done." Lo! we are now upon the seventh floor. To our surprise we found here not only a completely accoutred skylight and a wellstarted picture gallery, but a splendid darkroom for the development of emulsion plates, and for manipulations required by the visitors of the establishment. Intuitively we made for the door of this dark-room, and there found five other men occupied in the interesting process of watching the development of a plate. Scarcely had the solutions been applied when some one knocked at the door. He who developed the plate cried out "No button on that door, don't push." The voice from outside cried "Who's butting on your door?" But he was not allowed to come in until the development was finished. After watching the operation and hearing one of the attendants of the amateur department dissertate upon development, we made our departure, and were taken upon the roof. Here an immense tank is established for the supply of water to the dark-room below, and for the various uses of the whole establishment. We were assured that no building south of Broome Street is so high as this new establishment of the Scovill Manufacturing Company. The views from the roof are magnificent, of the whole city, and give one an opportunity on a cloudy day to select and secure glorious cloud studies of the feathery messengers from above. We were much pleased with our visit and inspection, though we could by no means take it all in by the sheer glance that we were enabled to get in so short a time. Quickly "Billy" attended us to the lower regions again, and permitted us to go even below the first floor. When we placed our hand upon his arm as though to stop him, he turned and smiled grimly, as much as to say, "It is my turn now, to take advantage of you, since you have been smiling at my buttons." No harm was intended by "Billy," however, for instantly the elevator stopped at the bottom of the great "well" through which it slides, moved by hydrostatic power; we were asked to "step out." We were now in the basement, where we saw all the arrangements of the engineer's department, preparations for the fire brigade, and all conveniences for the motive power machinery of the great building. whole department of employés of this establishment seem to be truly loyal to photography. The engineer was absent for a moment when we visited his room, though the machinery was going under full sway, and we discovered lying on his bench, open, with the page turned down, a copy of the Photographic Times, and near by a copy of Wilson's Photographics, showing that even the engineer of the establishment was not permitted to work in ignorance of the art to which the establishment is devoted, thus proving Mr. Adams to be not only a good organizer and executive head, but a strict disciplinarian. The engineer, we were assured, is "a skilful amateur photographer," but since he is rarely permitted to leave his post, no harm may be expected from him by the photographer at large. In every direction we were surprised by the completeness of the arrangements thereof, although we were assured by Mr. Adams that they were "by no means fixed yet." The system of alarms and calls adopted is known as the "Bogart's Oral System." By its means all waste of time on the part of employés may be avoided, and each call that is made, if it is thought necessary, can be heard at the principal office, so that the directing head may, if he so desires, be aware of everything that goes on from the basement to the roof. Photographers who visit New York should by all means make it a point to see this grand establishment, whence goes out the larger portion of the photographic goods supplied to the photographers of the United States. We wish it the continued success which the amiable and useful agent, Mr. W. Irving Adams, deserves for his enterprise and pluck.

A SUBJECT OR TWO FOR THOUGHT.

WE believe our past record will show that we have always been enthusiastically and warmly in favor of association among We know of no better photographers. way to promote the growth and welfare of any class of business men in these bright days of progress than that which comes through association, one with the other. The talking over methods and means, and matters of practice by practical people, is sure to result generally in good. If we have appeared at all lukewarm in the matter of our Association, it has not been at all from any real lukewarmness in our heart, or because of any personal feeling, but because we were puzzled to know what to suggest to make our Association do more good than it does. We may be accused of being a gourmand in our disposition, and expecting a great deal more to result from the amount of effort put forth than we reasonably ought to, and yet we feel that we have reason to be dissatisfied, and are warranted in making one or two suggestions, which we hope will be taken as meant for the real good of the whole. Without any spirit of fault-finding whatever, and disclaiming all disposition to find fault with any one personally, or with the managers collectively, we feel justified in saying that we do not think our Association accomplishes as much as it ought to. Some eight to twelve hundred of us meet every year in convention for about a week. We are at great expense of time and money and labor to be present. Considerable money is collected and expended for the exhibition and preparation of work of the Convention, and what good is accomplished in any great measure for the growth and

honor of our art? Those who attend, it is true, if they are attentive have opportunity to gather a good deal of good for themselves; but should the work of an Association like ours end merely with doing good to the comparative few who are present at its annual meetings? We think not, and here comes our point. We should do more to diffuse information for the benefit of those who cannot come. If this was done, there would be a great deal more enthusiasm, increasing with each year, than there is now over our Association and its conventions. It would cost less to excite such enthusiasm. The results for good would be far greater. Those who go to the conventions each year find it hard, probably, to understand this, but if they will place themselves in the position of the stayat-homes they will see things in a different light.

The man who is compelled by circumstances to remain at home, much as he may want to go to the Convention, will say to himself, "Why should I send my membership fees or contribution to this organization when I do not gather the least bit of good from it? If those who convene together would make effort to secure lecturers on subjects kindred to our art, papers treating of the various difficulties and departments of practice, and criticisms of the work exhibited, then I should feel quite willing to contribute my share of the expenses and maintenance of such a body, and would give it my cordial cooperation each year, whether I could be present or not." A single hint that more effort be made in the direction we name is what we have to suggest.

Our next suggestion must be made in the form of a query. Would not the Photographers' Association of the United States do more good work, feel more independent, and act in a more dignified manner if they did not each year expect eleemosynary aid from the dealers and manufacturers? Certainly there are enough photographers, and among them enough earnestness and zeal and independence too, to support the expenses of an Association like ours, without asking their expenses as a gift from the dealers and manufacturers. One of the

queerest elements we saw in a meeting once upon a time was when a long series of discussions took place as to whether or not stockdealers should be admitted to membership of the then newly organized Association. This was followed by resolutions of thanks to the dealers and manufacturers for their contributions towards helping bear the expenses of the Association's convention. We believe that any one interested in photography should be entitled to membership, but we cannot understand what claim photographers have upon dealers for the expenses beyond their dues. It is true that the dealers are supported by the photographers, but it is a business bargain between them. The dealer buys his goods to sell at a fair profit, and a good honest photographer will pay him, and expect him to make a fair profit on his goods. But is it right that the dealer should so manage matters as to increase the profits on his goods to such a degree as to enable him to make a large contribution to the expenses of the convention by which only a few of his patrons are benefited? Did it ever enter the head of the photographer—the patron of the stockdealer-that he, and not the dealer, bears the burden of this contribu- . tion to the aforesaid expenses? We have seen in our city, from time to time, crowds of delighted women and children leaving certain large retail establishments with their arms laden or decorated with balloons, lithographic plaques, chromos, and so on, and an expression upon their faces which seemed to say, "This was given to me; it cost me nothing," never seeming to realize for a moment that the merchant of whom they made the purchases could not afford to make these gifts except from a proportion of the increased profits which he made upon the customers who felt that they were getting them free, or, in other words, the recipients of these gifts themselves paid the bills for them. So, you may be assured, must it be with us in the matter of receiving money to help support our conventions. We believe that the membership should support them, and we believe, too, that the membership could support them if each man would honestly pay his dues year after year. We do not wonder that this is

not done, unless it be that the party can attend our Convention, for why should it be done? What good does a photographer outside get from these conventions? What inducement is there for him to pay his dues? Until he gets more good from the P. A of A., he will not do it. Let every photographer in the Union join this body and support it thoroughly, as the very best thing he could possibly do. Support it promptly so that its management can feel that they have something to work on, that there is no danger of their being left in the lurch with the burden of expenses to pay themselves, and then there will be great improvement in the amount of good, and in the amount of useful knowledge diffused for the use of the photographic world.

Here endeth our second suggestion, and we have but one more.

As we have stated before, it is our belief that a great deal more good for the amount of money expended would be received if an entire change in organization and conduct of the Association could be had. This we believe could be arranged by deciding upon some central point where the Conventions could be held year after year. There, a permanent building should be erected, large enough for all the purposes of the convention and the exhibition, and for practical demonstration. A permanent exhibition could be established, a system of prizes (not necessarily of much value, but bearing a good deal of honor) could be instituted, whereby a committee appointed by the convention each year, would select from the pictures exhibited a dozen or more which were considered as the best in the exhibition, such to be honored by being hung in the permanent exhibition. A certificate declaring them thus honored, signed by the committee, could then be furnished to the fortunate photographer honored through his work, and borne to his home as a trophy which he had well earned. some such system as this the interest in producing good pictures would be increased, a great deal of good practice would follow, a great deal of benefit would result, and it would help lift up photography to that dignified height which we who love it most, desire for it. Last year a committee was appointed to look into this subject of a permanent locality. For reasons which will be made known at the convention nothing has been done. It may be that during the coming convention overtures will be made that may prove acceptable, and something done actively toward the consummation of such a thing, which we should like very much to see carried out. If such a project is perfected, five times the amount of good done now will result from the annual convention and exhibition, and at one-half the cost. Photographers then would have a place of pilgrimage where, if they could not attend the conventions, they could visit at some other convenient time. It should be located at a place not necessarily an expensive one, but perhaps at some of our summer resorts, where all could have the opportunity to derive some of the benefits therefrom by visitation. A hundred good things would grow out of such a project as this; but we cease now lest we be accused of being visionary. Take these thoughts with you to Cincinnati, and let us see what can be done.

A NEW METHOD OF DEVELOPING DRY PLATES; ECONOMY AND UNIFORMITY SECURED.*

BY D. BACHRACH, JR.

IT may seem rather parodoxical for such a consistent and persistent advocate of wet plates for portraiture to write so much on dry plates, yet no one rejoices more at the improvements made in their quality, even though I believe that they have been largely instrumental in the "cheap John" degradation which now afflicts the craft. I believe, however, that I am more consistent than those dry-plate demonstrators, who constantly proclaim with great glibness of tongue that the dry plates give far superior results to those obtained with collodion, and then advertise their plates as "having all the richness, softness, and snap of a fine wet plate," (?) etc. But enough of that, and to my subject. It has for a long time

For the benefit of the fraternity, Mr. Wilson gives permission to other journals to copy this article,

been my opinion, both from theory and some experiments that I made, that the present method of mixing both the pyro and alkaline solutions when developing, was neither the best nor most economical method, if, as I think, we can now mix up an aqueous solution of pyro that is stable and will not change. Those who understand the chemical action involved, are aware that pyro occupies almost precisely the place of free nitrate of silver on a collodion plate, and the sal soda or ammonia the place of the sulphate of iron or pyro, whichever was used. I formerly acted on this theory in the case of tannin plates, and used to immerse them in a fifteen to twenty grain solution of nitrate of silver, and then applied the pyro developer, instead of, as usual, mixing a few drops of silver solution with the pyro before developing, and I always obtained a more uniform development. Acting on this theory a few months ago, I developed a few plates by first immersing them in a strong pyro solution for a minute (which I then drained off again into the bottle), and then developing them with the sal soda solution, using the same quantity of water as if the solutions had been mixed in the usual way. The result was as good as the best developed plates by the other methods, but something intervened to take the matter entirely out of my mind. On a recent visit to Philadelphia, I communicated my ideas to Mr. Trask, who at once acted on the suggestion, and a letter from Mr. Carbutt, tells me it works excellently. Since then I have developed a number of successful plates this way, and I will here give the formula I found best (I used both Carbutt's and Cramer's plates), which I submit to others, in the hope that they may improve on it, as we are not using dry plates as largely as many others. It will be seen that several advantages are gained: First, the immersion in strong pyro causes a uniform absorpton of it all over the plate. Second, at least two-thirds of the pyro is saved.

For plates, say up to 11 x 14 inches, have a dipping bath (your old silver bath-holder will do, rubber as well as glass), in which permanently keep the following solution in quantity sufficient to cover the plate. An

occasional filtering is all that is necessary to keep this in order indefinitely.

Water, sixteen ounces; sulphite of soda, four ounces; dissolve, and add enough sulphuric acid to turn litmus paper decidedly red. Then add one ounce of pyrogallic acid, one-quarter ounce of bromide of potassium, and one ounce of sulphate of magnesium. When a plate is to be developed, dip it in this bath not over a minute, then take out and drain it, and develop with the alkali.

Developer, Stock Solution.

Crystallia	zed	Sal Soda,			½ pound.
Water,					1 quart.
Sulphite	of	Soda,			1 pound.
Bromide	of	Potassium	١,		½ ounce.

Of this take one-half of an ounce to two and one-half ounces of water, and develop the plate as usual.

It will be noticed that I put the sulphite of soda in the second solution as well as in the first, because so little of the latter is used that the desirable color given by the sulphite to the plate would otherwise be absent. The sulphate of magnesium is added to the first solution to prevent the softening of the gelatine which is likely to occur when the solution is either warm or tepid. Should the plate develop too rapidly from over-exposure, have your bromide solution at hand to add to it. But this is not to be feared as much as with the other methods, as the negatives, even with rapid development, do not come out weak and flat, unless a very great amount of over-exposure has been given. They have more body and snap to them. These proportions may not work best with all plates, and the proper strength can easily be determined. Should the negative be undertimed, add water to the developer. As the latter costs but little by my method, use plenty of it to cover your dish, as it can be used over and over without impairing its efficiency for a large number of plates (so little pyro being present), and it only changes by absorbing pyro from the plates, thus causing them to develop harder and more intense; it should then be thrown away. Those who desire to use ammonia, can do so by simply using the same quantity of it in the developer as they do now, but the sulphite of soda addition

must not be neglected. The English sulphopyrogallol, as sold, will do for the dipping bath without addition or dilution. I would not advise the use of ammonia, however, as I do not find the result as good.

With very large plates the use of a horizontal dish will save large baths, but the pyro solution should always be poured back in a bottle unless the dish is tightly covered. The bath-holder also should be well covered when not in use. I believe I am rather under than over the mark when I say that two-thirds of the pyro is saved by my method. I hope others will take hold of this and give us the benefit of their experience, as from the short time I have used it, I cannot as yet give such exact information as longer experience may furnish.

I find that the slight discoloration of the pyro solution caused by dipping a large number of plates does not impair the quality of the negatives a particle. An addition of about fiften grains of salicylic acid in one-half ounce of alcohol to each ounce of pyro would probably even prevent this, as that is known to be a good preventive of decomposition.

I will add that the addition of one-half ounce of glycerine to the pyro solution, as given in this article, would not only aid the keeping qualities, but may also improve the quality of the negative. Let us hear from some experimenters.

In very hot weather it is necessary, in using this developer, to keep the solution in the bath-holder at a temperature not exceeding 60°, and if possible 50°, and the water used to mix the soda developer should be cold, ice-water if convenient. This remark will apply to any developer in which sal soda is the active agent in hot weather. If the ammonia developer is used with this method, ice-water in the developing solution is not requisite, if the bath solution is cold.

It must not be forgotten that greater body can be obtained by a longer soaking in the pyro bath, and per contra by shortening it. With various samples of plates it can soon be determined what is the correct time. So the same developer, it will be seen, can be used for any kind of plates or exposures.

N. B. In a three weeks' experience with the above developer since writing the article,

I find my theory fully confirmed. Each plate having but a certain quantity of pyro absorbed and on the surface, a little prolonged development does not increase the density too much while bringing up detail, and any lack of contrast apparent from over-exposure is easily corrected by an addition of bromide and pyro to the developer. But anything like a correct exposure always comes up to the proper printing density without any "doctoring." I also find that the addition of fifteen grains of salicylic acid in one-half ounce each of alcohol and glycerine to the pint of solution of pyro, as given above, keeps it almost colorless. fact, I find the negatives more uniform in quality than by the old method.

IMPROVED PYRO DEVELOPER FOR AMATEURS.

At the meeting of the Society of Amateur Photographers of New York, held June 10th, Mr. Henry J. Newton made the following remarks in regard to a new pyro developer which he has used:

At the suggestion of Mr. Edward L. Wilson, of the *Philadelphia Photographer*, I have put into concentrated form my new developer of soda and potash, for the use of amateurs during the summer. I would recommend:

Water,				٠,			32	ounces
Granul	ated	Carbo	nate	of	Soda	, or		
the c	rystal	s fron	n wh	ich t	he w	ater		
of c	rystal	lizati	on h	as b	een	ex-		
pelle	d, .						3	66
Carbon	ate of	Pota	sh,				3	46
Sulphit	te of S	Soda,					3	-6

A quart of water will dissolve all these, and it is about all it will dissolve. The proportion of the ingredients given contains a little short of one hundred grains to the ounce of alkali. I never use pyro in solution; use it dry—it is a little more trouble-some, but you will always get the best results with dry pyro. Put in your developer very soon before using. But for amateurs it is more convenient to have it in solution, and to preserve it I have adopted concentrated formic acid. Formic acid is a developer of itself. One minim to the ounce of water is sufficient for four grains of

pyro, and it will preserve a pyro solution of almost any strength you wish to make, that is, it will prevent oxidation. To illustrate, you make a solution of

Water, 12 ounces. Concentrated Formic Acld, 48 grains.

If you wish, you can double or treble that quantity of pyro to suit your convenience.

To develop a 5×8 plate I take water, three-quarters of an ounce, and add the alkali and sulphite of soda solution, one-quarter of an ounce; pyro solution, one ounce; total, two ounces. Then you have two grains of pyro to the ounce in the two ounces of the developing solution, and six grains each of potash, soda, and sulphite. That is sufficiently strong for all ordinary work.

The one-quarter ounce of potash and soda solution contains about twenty-five grains of alkali and twelve and a half grains of sulphite of soda, which is a little short of one hundred grains to the ounce, but not short enough to make any difference in its use. For very rapid exposure with a small diaphragm, use double the quantity of the alkali solution, and nearly double the quantity of pyro.

This developer is probably the most energetic of any of the alkaline developers that have been given to the photographic public. It has the advantage in this form that you can use it with perfect safety with either a long or a short exposure. When you know what the exposure has been you can adapt the strength of the developer to suit the exposure, and be sure of obtaining a satisfactory negative. The citrate of soda can be used as a restrainer, if a restrainer is found to be necessary. At a recent meeting of another society I exhibited two negatives, one exposed two seconds and the other twenty seconds, on the same subject and developed with this formula. Both were perfect negatives, and no one could tell which had the longer and which had the shorter exposure.

You have the elements in your power to develop a negative under most any condiion of exposure, and it makes just as good a negative whether the exposure has been one second or twenty or thirty, provided you know before commencing to develop what the exposure has been.

I have experimented upon a large variety of plates of different manufacturers, and have only found one brand which required the presence of a bromide to produce a perfect negative, where the citrate of soda failed to keep the shadows satisfactorily clear, and would therefore recommend, in a case like that, the use of from a quarter, as a minimum, to one grain as a maximum, of bromide of soda to the ounce of developing solution.

THE GENESIS OF A PICTURE.

It will bring the subject of picturemaking more home to the student if I take a picture that has been really done in photography, and describe its life-history from its conception to its realization in a negative.

And, first of all, how do subjects originate? In great part this question is very difficult to answer. Many of my pictures arise before my mind's eye in a most inexplicable manner, and remain there until I lay the ghosts by making sketches of them. I see these

"Dreams that wave before the half-shut eye," absolutely and definitely, and can recall them when I please. They come like a dream but do not fade away till they are done with. I often try to trace any circumstance that might have given birth to the thought contained in the visual design, but can seldom come to any satisfactory conclusion. But to go much into this part of the subject can have little of interest or use for the student. These visionary images come without rhyme or reason; the designs that will most instruct the learner will be those that come from both these proverbial causes-those, in fact, which have some tangible cause, that can be traced and assigned, for being born.

Most designs obtain their origin from suggestions found in nature. A picturesque bit of landscape will almost certainly suggest to the artistic eye where a figure or figures should be placed; this will lead on to the questions: What are they to do, how should they do it, and how be dressed? Then the subject ought to appear to the artist, and will do so if he tries his best to see it, although it might be only a poor or hackneyed one; he will find that experience will improve both the quantity and quality of his ideas. It is astonishing how practice assists the imagination. That art breeds art is a well-known aphorism, and it is as true that subjects breed subjects. The picture you last produced leads up to the next, and the better you make it the better will be those that follow. The student after much practice will find himself half unconsciouly storing up hints of wayside beauty and suggestive facts, and composing them in his mind into pictures, always with an eye to their possibility in photography.

In my own practice I never now feel at a loss for a subject. They seem to come naturally when required, but this is the result of experience rather than a natural gift, for I remember many years ago being for a whole twelvemonth without a single idea. Neither could I work up one by any means. I tried every device I could think of. I read a great deal, visited picture galleries, and tried to borrow thoughts from illustrated books, but all to no purpose; no workable idea would arise. I was fallow for about a year, and then the fac-

casionally find that his mind is a blank. It would be almost reasonable to suppose that the more of your ideas you used up the less you would have, but this is not the case. I know this, not from my own experience only, but from questioning many artists.

Sometimes incidents you meet with in the streets, or in country walks, will suggest subjects; not necessarily the actual incident one sees, but something that may be worked into some other scene, with perhaps many alterations. Sometimes a fine pose may be seen, or a lovely bit of light and shade; sometimes an expression or a quaint costume—all these things should be noted for future use. No suggestive bit should be allowed to escape; all should be sketched or noted. It is good practice also to try to analyze why the pose is beautiful, or the light and shade effective. This a knowledge of the rules of light and shade will enable you to do, and to do this easily, the student will find an added pleasure to his life-another feather to the wing of his artistic flight.

We will now take a picture that has been really produced by photography, and see how it was conceived and finished. To analyze and dissect a picture in a cold-blooded way, as I am going to do now, is to rob that picture of any poetry it may contain, and leave nothing but a mechani-



ulty returned, and has always been more or less present. This I put down to constant use, and I mention it for the encouragement of the young beginner, who may occal interest, but I know of no better means of conveying the information; I will therefore take one of my own—that one I have called a "A Merry Tale" will be suitable

for the purpose. The frontispiece is an ink-process reduction of this picture, and will assist the reader in understanding what follows.

In the drawing-room of a country house in North Wales five young ladies in evening costume were amusing themselves after dinner. One of them was relating some funny circumstance to the others, who arranged themselves in a picturesque group round the story-teller. Here was the germ of the picture. A few seconds sufficed to make a sketch of the composition. illustration is a reproduction of the jotting in my note-book, and I may remark, by the way, that the practice of making rough sketches of composition and light and shade is very useful, especially if accompanied by a few descriptive notes. It teaches the student how to observe, if it does no other good. Correct drawing is by no means necessary; the "effect" is what should be noted. To return to the picture. By an easy transition the mind easily changed the young ladies into peasant girls and suggested suitable surroundings. A sketch was made of the arrangement, and the dress for each figure decided on. In selecting the costumes, the light and shade of the group, and its relation to the landscape, were not forgotten, neither were the accessories-the basket, jug, and stick. colors were taken into account only as to how they would translate into black and white.

It was arranged that the group should form part of our work for the next day, but, as often happens in the mountainous districts of Wales, man proposes and the weather imposes; the morning opened with a deluge of rain, which continued more or less for several days. Those days were not wasted, for young ladies now-a-days cannot only play tennis, but some of them can shoot and throw the fly, to say nothing of ratting and ferreting. At last the storms were over, and the sun shone again, but with a great deal more wind than a photographer thinks pleasant. However, we determined that we would have some pictures, good or bad, that morning. We were getting hungry for work, and a conscientious photographer is as anxious to make a

good bag as a sportsman, but a photographer's desire for picture-making is nothing to that of a set of really enthusiastic models. Mine, I know, go into the business with the greatest energy. Off we started to a quiet lane about a mile away. The photograph conveys no idea of the picturesque effect of the five girls in their humble but brilliantly colored garments. The effect of colors under the green hedgerows and through the fields was quite beautiful. The choruses sung on the way had, perhaps, nothing to do with photography, but the foxgloves and other wild flowers the singers gathered came in very useful in the picture. Arrived at the selected spot, the camera was unpacked, and the models placed approximately in their proper places, interfering branches cut away, aud everything got ready, so that the last moments might be devoted to the quite final touches, expressions, and other little things. shone a cold steely blue, and the wind was so troublesome that we had some thoughts of giving it up after all, but we decided we had taken too much trouble to go home without spoiling at least one plate.

Now for the arrangement of the group. The girl to the left was sitting up at first, as will be seen in the sketch, but being a young hand at the business, she could not control herself, and, enjoying the fun, threw herself back on the bank screaming with This was a happy accident, laughter. which much improved the composition, and was seized immediately. She was at once shouted to keep her place, which, being an easy one, required little further thought on the part of the photographer, who could now turn his attention to the other figures. The seated figure, the one in the straw hat, was a steady old stager, with plenty of experience and no nerves; she required but a moment's attention. The next figure, always dramatic in pose, and with a charming expression, is, perhaps in consequence of other good qualities, rather shaky as a sitter. She required a rest of some kind. The stick was useful here, and was of immense value in the composition. A bit of straight line to contrast a number of curves is always effective. This settled the three figures that were easiest to keep

The standing pose being by far the still. most difficult to keep-for a standing figure without a rest often sways like a pendulum The figure telling -was left until last. the story was now settled; the pose came easy, the model being an admirable storyteller, and thoroughly up to her business, but it was necessary to give all possible effect to the hand, for the hand, if well placed, would do more towards showing the intention of the picture than anything else in it. It, in a way, leads the chorus of expressions. It emphasizes the situation-it makes you feel the girl is speaking. It was so arranged that, to make it more conspicuous, it should appear partly in sunlight and partly in shadow, and every leaf or twig that came behind it was hurriedly removed. The standing figure, who could not be expected to keep the pose for above a minute or two, was placed last. The jug, basket, and foxgloves, which form the keynote of the composition in the foreground, had been previously arranged, and all was ready. But a last glance from the camera showed the photographer that the tree was exactly over the head of the standing figure, and cut the composition into two parts. This would never do. But instead of moving the model the camera was moved. This corrected the error to some extent. It would have been better to have moved it a little further, but it was feared the other tree would interfere with the story-teller. A few last words-at the special request of the models I use fictitious names-" Now, girls, let this be our best picture. Mabel, scream; Edith, a steady interest in it only for you; Flo, your happiest laugh; Mary, be sure you don't move your hand, or all the good expressions will go for nothing; Bee, I will say nothing to you, but leave you to your fate. Steady! Done!" and two seconds' exposure settled the matter. I scarcely expected a successful result, the thing was so difficult; but as the wind was blowing almost a gale, I did not care to try another plate. As it happened, I found, when I developed the plate a fortnight afterwards, I had got a good negative. The sky was white and blank, but the use of a second negative, delicate and not too obtrusively printed, soon put this matter to rights.

This seems a long story to tell, but the picture was exposed in under six minutes from the time the models first took their places. The quickness is one of the secrets of success, but when your picture is to include figures it should not have the appearance of hurry, for "hurry hinders haste," and besides, has the effect of flurrying your models; it should be the result of a perfect knowledge of what you want to do. A model should never be kept waiting longer than is absolutely necessary. It is better to give up little things rather than to lose a fine effect.—H. P. Robinson, in *Picture Making by Photography*.

[If our readers will look at "Our Picture," February, 1883, they will see a reduction of "A Merry Tale."—Ep. P. P.]

PHOTOGRAPHY IN GERMANY.

FILM IMAGES AND SUPERFICIAL IMAGES.

THERE are two methods for development now in general use amongst photographers for the production of negatives; the one employed with the wet collodion process, and the other with the gelatino-bromide of silver and collodio-bromide of silver plates.

The action of the developer employed with the wet collodion plate consists in the superficial deposition of metallic silver upon those portions of the plate acted upon by the light; while with the gelatino- or collodio-bromide, the agency of the developer operates to produce a chemical decomposition of the sensitive substance acted upon by light, by which it acquires a dark color, the effect being through the entire film, or through the greater part of it.

Now, since the introduction of the ferrous oxalate developer we cannot properly speak, by way of distinction, of an acid or alkaline developer, I would propose that we call the pictures developed with presence of silver nitrate superficial images, and those developed without its presence film images.

By a certain treatment with nitric acid before fixing, the film image may be converted from a negative to a positive. An unfixed superficial negative does not thus change by the agency of the nitric acid; it remains almost the same as it was when it came out of the silver bath. It is true that it will be perceived in the densest shadows that the film has been somewhat acted upon. That is, there is, even in the superficial image, a tendency towards the film image, but it is not sufficient to characterize it.

Four years ago, Carey Lea called attention to the fact that it would be a desideratum to combine the two methods of development, and pointed out that with the intensifying of a wet collodion plate with oxalate of iron both could be employed—to be sure, not simultaneously, but through their effect upon the same material. He continues as follows:

"The following results I will not offer as definite, indeed, I would not publish them were it not for the fact that I must suspend for a long time my labors in this direction. Yet I hope it may give an impulse to further investigations.

"The solution with which I experimented consisted of:

"The first two salts were dissolved in water, then the iron was added, and the whole acidified with tartaric acid.

"This developer, although not entirely satisfactory, is the only one which can be used indifferently for a wet plate or a dry plate. Mixed with silver nitrate, or poured upon a wet collodion plate, it acted exactly like the common iron developer. No other single developer is capable of doing this. As I say, I am not fully satisfied with it, nevertheless it is a step in the right direction.

"The ordinary iron developer, when flowed over an exposed dry plate without the silver nitrate has no effect in calling forth an image—not even a trace. The oxalate developer cannot be mixed with nitrate of silver, because it decomposes it. Pyro, it is true, will, if alkaline, develop a dry plate, and when acid a wet plate; but that which gives it one peculiarity destroys the other. I have convinced myself of this fact by weakening a strong solution of pyrogallic acid with tartaric acid, and laying a

plate in it for several hours; not a trace of an image was perceptible."

The above-mentioned boro-tartrate developer gives, with wet plates, intense black images, and with dry plates, brown images. The solution remains clear for a long time, and deposits gradually metallic silver without turbidity.—Photo. Archiv.

GLEANINGS FROM ABROAD.

It has recently been ascertained that when pressed pyroxylin is plunged in acetic ether or in nitro-benzine for a few moments, the surface takes, on coming from this short bath, the appearance of a varnish, and thoroughly protects the other portion of the substance from dampness, etc. No doubt acetic ether could be used in this way to improve the collodion varnish used in photography.

CARBONATE OF POTASH AND PYRO DE-VELOPER.—The following is adapted from Eder:

Solution A.

Carbonate of Potash, . . . 432 grains. Water, 2 ounces.

Solution B.

Sulphate of Soda, . . . 4 drachms. Citric Acid, 15 grains. Water, 2 ounces.

Dissolve, and add pyro one hundred and fifteen grains.

To use, take forty minims of a solution and add about three ounces of water, also forty minims of B, then add three ounces more of water. Then mix the two and pour over the plate. If more density is required, add more of solution B. This developer works slowly but surely, and gives crisp, clean, and clear plates, and does not stain the fingers.

Mr. Baden Pritchard asserts that it possible, by using a little care, to remove successfully the film of a bromized gelatine negative, provided that the plate is well polished and has no irregularities on the surface. By means of a knife, the film is cut all round, an eighth of an inch from the edge, and then carefully raised; by using a mild heat, the operation may sometimes be aided. As this

film is extremely thin, the operator should be careful not to breathe on the plate, as the humidity of the breath would produce wrinkles difficult to correct. This process is especially applicable to the commercial plates called patent plates. But the process of Mr. Plener may be applied to all kinds of plates. It consists in plunging the negative in a highly diluted solution of hydrofluoric acid -a few drops of the commercial acid in eighty cubic centimetres of water. As soon as the acid penetrates the film and attacks the plates, the separation is effected, and the film floats on the surface of the liquid. It may be dried by pressing it on a plate which has been slightly waxed, from which, when dry, it may be easily removed. Should it be necessary to strengthen it, it may be covered with a film of plain gelatine, previously soaked, and then pressed upon the first film after it has been placed upon the waxed plate.

MR. ARNOLD SPILLER, of London, writes that he has experimented, a year ago, with the starch and gelatine emulsion of Mr. Andra, which has been brought to notice by Mr. Leon Vidal. He found that by substituting a small quantity of starch for onehalf of the gelatine (in a bromized gelatine emulsion), the sensitiveness of the plate is not affected, and the film may be fixed and washed as rapidly as collodion. He thinks, however, that this application will be limited to exceptional cases, and this on account of the ground-glass appearance resulting from the operation. He explains this effect by calling attention to the fact that the starch is not in solution, but simply in suspension in the liquid, which causes the granules to The author loses sight of the fact that this argument is quite as applicable to gelatine as to starch, but with the first of these substances the swelling is much greater than with the starch.

At the Photographic Society of Halifax, a long discussion occurred on the best developing liquid for gelatino-bromized plates, and the great majority of the members present declared themselves in favor of the ferrous oxalate, for which the greater number showed a veritable enthusiasm. Mr.

Pocklington, however, has just modified this developer by the addition of a very small quantity of bichloride of mercury, over which modification he is equally enthusiastic. To thirty cubic centimetres of the ordinary ferrous oxalate developing liquid, he adds one drop of a saturated solution of bichloride of mercury. Expose, in the ordinary way, amply, but not too much; develop the image as usual; wash well, and fix. The color of the negative is a very rich black, with very light shadows. For transparent images, for use in the lantern, obtained on slow plates, this slight modification in the ferrous oxalate liquid has given excellent results.

An anonymous correspondent of the Photographic News calls attention to the expansion of albumenized paper. He possesses two prints made from the same negative. When they are dry, these two prints are absolutely of the same size; but if soaked in water for an hour, one becomes longer and the other wider. In the case of a portrait, this effect would be very curious, as in one print the face would be longer and in the other broader. Up to the present time, this effect has been attributed to the imperfect manner in which the albumenized paper has been placed upon the cardboard, etc.; but the examples mentioned above show that the defect occurs before the prints are mounted. Mr. Leon Vidal remarks that the effect may be obtained at will, according as the paper is printed in the direction of its length or its breadth. This is old here.

I have been trying hydrokinone, two thirds of a grain of hydrokinone and one-sixth of a minim of liquid ammonia to the ounce, for "ordinary" weather and wet plates, exposed fifteen seconds to a north sky (clear) with stop f-42—ordinary negative—making positives on the three-quarter plate. Manner and results, as follows:

Soak one minute in water, and one minute in two-thirds of a grain of hydrokinone to the ounce; then add one-sixth of a minim of liquid ammonia to the ounce. In six minutes, faint image appearing; in ten minutes (four minutes from last note), recognize picture; in fourteen minutes, details

out very faint; in twenty-one minutes, intense enough for transparency. Fixed and yellowish-reddish green fog, not removable by the Edwards's modification of Cowell's clearing solution (one ounce of alum, one ounce of citric acid, and three ounces of iron to twenty ounces of water); nor by bleaching with ferric oxalate and redevelopment by ferrous oxalate developer.

The same exposure and plates, develop beautifully with one-half minim of ammonia, one-quarter of a grain of bromide of potassium, and one grain of pyro to the ounce; with perfectly clear shadows—using the sulpho-pyrogallol of the Platinotype Co.; but take five minutes before they show the faintest image, beginning, in fact, a very slow development.—H. L. Vercoe, M.D.

Mr. L. VIDAL, in the Paris Moniteur, calls the attention of his readers to the improvements made in photo-typography by Messrs. Petit, of Paris; Ives, of New York; Meisenbach, of Munich; Angerer and Goschl, of Vienna.

Mr. Vidal remarks in this connection that the idea so successfully treated by the skilful inventors above mentioned, dates back several years, as in 1873 a patent was taken out by our eminent colleague, Mr. Walter Woodbury, for a process similar to those now in use.

The Moniteur publishes two prints, obtained through the courtesy of the Photographic News, and made by the process described by Mr. Woodbury, as follows:

"I prepare, says he, sheets of bichromatized gelatine similar to those used in photoglyptic, and I expose them to the action of light, but place between the positive and the gelatine film a network printed on a translucent sheet of collodion, or mica, or a piece of cambric, or tulle, or any other tissue or network of the same nature, such as a grained surface resulting from a print on a lithographic stone, or an impression of fine lines very close together. When the sheet of gelatine is washed in warm water it gives a relief representing the photographic positive cut by numerous lines, instead of preserving the continuous modelling of the original. I now take an impression with the hydraulic press, or in any other manner, upon a sheet of soft metal, and I use the cliche, thus obtained, for making typographic impressions. If many prints are required, I make galvanotypes from this impression. I prefer using diffused light for printing reliefs. Sometimes I take a negative in the camera from a network at the same time that I reproduce the negative, the relief is thus obtained without the interposition mentioned above."

Dr. Phipson, in his letter to the Paris Moniteur, gives what he styles an excursion among the English photographic advertisements taken from a single journal.

Although fifty-three advertisements are mentioned, Dr. Phipson remarks that they give but a very imperfect analysis and idea of the number and variety of the advertisements that now take up so much space in our photographic journals. This is perhaps a more important matter than is generelly supposed, as the number of advertisements indicates the measure of the prosperity of any industry.

MR. JOHN BARTLETT has made some experiments with the view of utilizing casein in place of gelatine in the preparation of photographic emulsions. He uses pure casein, obtained from skim-milk, from which all fatty matter has been completely removed. Nitrate of silver precipitates the solutions of casein used by the author, and this precipitate is dissolved in the ammonia, which should be added with care; the solution is then heated to the boiling-point, yielding a rather fine emulsion. In fine, Mr. Bartlett has shown that it is very probable that casein could take the place of gelatine in the preparation of bromized plates, and that its sensitiveness might be very great; hut he does not yet know if any advantage is to be obtained by this substitution.—Archiv.

OUR PICTURE.

"OUR PICTURE" this month was printed from a series of splendid negatives sent us by Mr. C. W. Motes, of Atlanta, Ga.

There are two phases of art which lie within the province of photography to represent: the power of conveying the conception of actual motion in the external world, and the presentation of the beauty of nature in repose. Instantaneous photography has recently accomplished some wonderful results in depicting animated nature with all the grace and charm of motion, showing with accuracy and beauty the delicate play of the muscles of animals.

It has also given us in the inanimate world the gentle agitation of the waters, and even the tempestuous loveliness of the sea; but, marvellous as are these exhibitions of skill, it should not be forgotten that the power of giving to the beholder the conception of repose, without degenerating into weakness of expression, is a far more difficult task.

The portrayal of passion, as exhibited in a human being, is the legitimate province of painting, but in sculpture the greatness of the artist is more manifest when the image he creates has that calmness and repose which give the conception of strength combined with beauty.

Mr. Motes has undertaken this difficult feat. He has shown his excellent good taste by choosing a theme, not trite and hackneyed, but at once novel and chaste, and associated with incidents of classical mythology. There are mythological subjects whose nature precludes them from representation by photography. Had he chosen such a subject as Psyche, no art could have concealed in the living model the tinsel wings attached to the shoulders. The device would have been at once manifest, and the whole effect of plasticity destroyed. He has called his conception "A Daughter of Danaus." The story in briefest form is as follows:

According to mythological history Danaus was the son of Belus and grandson of Neptune. He was a native of the Thebais of Upper Egypt, whence he migrated into Greece. His brother, whose name was Ægyptus, had received from his father Arabia as his possession. Danaus either imagined or had reason to believe that the sons of Ægyptus were conspiring against him to deprive him of his possessions, and fear or the advice of the oracle induced him to build a large ship and to embark with his fifty daughters. He arrived in good time at Argos, where the fifty sons of his

brother met him and assured him of their good intentions, suing for the hands of their cousins. Danaus gave them his daughters to wife, but still mistrusting them, he furnished his children with daggers, making them promise to kill their husbands the first night of their marriage. They all fulfilled their promise with the exception of Hypermnestra alone, who was married to Lynceus. Love got the better of her vow; his life was spared. Danaus afterwards found it difficult to get husbands for his daughters, and was obliged to invite heroes to public contests of skill, offering them as prizes to the successful contestants. The poets relate that the daughters were punished in Hades by being compelled everlastingly to pour water into urns full of holes.

Mr. Motes has represented his model with the instrument of her punishment in her hands. The young lady he has chosen to personate this daughter of Danaus possesses just that classical pose and Grecian type of feature which lend such charm to the representation. She has entered into the spirit of the conception, and has given that repose to her countenance which is essential to a work of sculpture. Mr. Motes, by judicious lighting and artistic taste in the disposal of the drapery, has heightened the effect. The picture has all the appearance of a statue. We congratulate all concerned on the result, and commend this style of picture to the craft.

The prints were made at our new rooms, No. 1125 Chestnut Street, Philadelphia, on the Dresden paper imported for us by Mr. G. Gennert, 54 E. Tenth Street, New York.

A PHOTOGRAPHER'S METHOD OF MAKING HIS OWN EMULSION PLATES.

BY RANALD DOUGLASS.

Below is given a good way for making one's own plates, which, if carefully and exactly followed, will give absolutely reliable results. Extreme care and cleanliness are necessary at all stages of the process.

In the first place, select the glass—use the flattest lights for larger plates, and cut down the curved or irregular ones to be used for smaller plates. The edges are to

be roughened as usual. The plates are then laid one by one, in a porcelain or stoneware dish, which holds the acid—1 part acid to 5 or 10 parts water. Pure acid allows more water to be used than does the common article. I use a mixture of nitric and sulphuric acids. After several hours' soaking, take them out and wash and albumenize as for wet.

Below is an excellent formula, I believe Brooks's:

Albumen of one egg.
Water, . . . 20 ounces.

Shake or beat to a froth, then add 20 drops of carbolic acid in 1 ounce of alcohol; add this mixture to the albumen and filter through cotton or paper. In coating with albumen, let the first application run off into the sink, then give the glass a second coat, and rack up to dry.

No. 1. Weigh out 200 grains of Swiss gelatine, put it in a pitcher or any convenient vessel, and cover it with cold watertap-water is good-and allow the gelatine to soak till swollen, which takes fifteen minutes or so; pour off the water and drain, then add to it the following: 360 grains of bromide of potassium dissolved in 4 ounces of pure water, to which is added enough dilute hydrobromic acid to turn blue litmus paper fairly red-not too red. The hydrobromic acid is diluted 1 to 5. Now, dissolve in a water-bath the gelatine and the bromide, and pour it into a bean pot, which can be found in any grocery or crockery shop. It has a loosely fitting lid.

No. 2. Dissolve 450 grains of nitrate of silver in 7 ounces of warm water, which should be pure; tap-water is good.

No. 3. 25 grains of iodide of potassium dissolved in a drachm of water. Now carry Nos. 1, 2, and 3 into your dark-room and close the door; allow orange-red or ruby light in it. Add No. 2 slowly and a little by little into No. 1, which is dissolved in the bean pot. Now, with a strip of glass, keep stirring briskly while the silver is being added. This prevents coarse particles from being formed. After all the silver is added, add lastly No. 3; stir for a little while longer, then put on the cover of the bean pot, tie over the top several thick-

nesses of orange or red cloth or paper, which will allow steam to escape, and at the same time keep out the light. By this time I suppose your water-bath is boiling. Put in your bean pot, but not to quite touch the bottom of the water-bath; something must be arranged to hold it an inch or so above the bottom. If you want ordinary rapid plates, say as rapid as those marked six times as rapid as wet (if you are a novice in plate-making, you should begin with this grade), let it boil for half an hour, taking the bean pot out once in a while and shake it and replace. One hour's boiling will give as rapid plates as the best commercial plates, at least it has been my experience.

Suppose the time of boiling is now up, take the bean pot out and set it where it can cool down gradually. In the meanwhile, soak 400 grains of Swiss gelatine in enough water to cover it, and when it is swollen, drain and dissolve carefully and gently in six ounces of water. The heat must be just enough to slowly dissolve it with stirring at, say, 110° F. to 120° F. Too much heat will spoil it, and your plates will frill. Here use the greatest of caution. When it is dissolved, in the dark-room, add it gradually, with constant stirring, to the contents of the bean pot, which latter should first be cooled down to 90°, or lower. Stir a while longer; then put on cover; place the bean pot in cold water; in summer, ice is necessary; in two hours the gelatine will be set firm. It should be firm. If it is not, add more ice to the water by which the bean pot is surrounded. Now, cut up the solid jelly with a strip of glass, take some of it and put it on some open meshed-cloth. I use linen having meshes of about one-sixteenth of an inch. Strain the jelly through the cloth into a one gallon stone jar half filled with cold water; do so till all your emulsion has been strained through the cloth. In straining the emulsion your hands must be clean and kept cold. If they are dirty, your plates will be dirty also; if they are warm, part of your emulsion will redissolve and be lost. When all your emulsion has passed through the cloth into the one gallon jar, tie the cloth over the mouth of another jar which should be two gallons capacity or more, stir the contents of jar No. 1 and pour it on the cloth; put a gallon of water into the jar and pour it on the cloth again. The water will run through the cloth and leave the emulsion in the form of a cluster or bunch of strings behind. If any passes through, it can be caught in the second jar.

If you have any reason to suppose light has got in your emulsion in any part of the process since you mixed it with the silver, you can put two or three ounces of saturated solution of bichromate of potassium in the first jar, fill it three-fourths with water, and return your emulsion to it, and stir and leave it there half an hour, then wash it. Fog will be removed, but the sensitiveness will be considerably reduced.

Return your emulsion to jar No. 1, fill it two-thirds with water, stir it, cover it, and leave it ten minutes; then pour it back on the cloth over jar No. 2, which, of course, is first emptied of slops. Repeat this operation six times or so and your emulsion is well washed. Now, allow your emulsion to drain over the cloth till it is free from sloppiness, when it can be now remelted in the bean pot, which has been well washed with warm water to free it from scraps of old emulsion. Again, here great caution is necessary with the heat. Use no more than will slowly dissolve it, or it will make your plates frill-110° to 120° F. is about right with stirring. Add to it 1 ounce of alcohol to which have been added 25 drops of carbolic acid. You can now coat a few trial plates, but I would advise to reset the emulsion and let it stand in a cool place, not less than three days, by which means it becomes ripe and more rapid for being kept. The carbolic acid makes it keep well for months; alcohol facilitates ripening and flowing. When wanted for use, take out of the jelly, with a strip of glass, as much as you want, and remelt at a gentle heat, filter through canton flannel into any convenient vessel, the bottom of which must come very near to the nozzle of the funnel to avoid air bubbles. I coat with an ordinary Anthony 8 ounce bottle. Pour, to avoid air bubbles, a little on one corner of the plate, which must be slightly warm or the gelatine will chill on it and

produce markings of uneven coating. Spread it with a glass rod, or, better, with your little finger, then rack it to equalize the coating, slip cautiously on a slab of glass or stone previously well levelled, wash your finger and proceed till your slab is full. Take up your plates and put them in a rack, as soon as they are set. If the coating-room is too hot, plates will not set; the room should be kept below 90°, or, better, below 80° F.

In summer you should coat early in the morning, at or before sunrise. Your plates should be set inside of five minutes, or they are prepared wrong, or too much heat has been used somewhere, supposing your slab is quite cold. In such a case, dissolve a sheet of gelatine in as much water as it will absorb, and add it to the emulsion and it will correct the emulsion, and make it set better. But if you have followed out the above directions carefully, you will have no trouble anywhere. Leave the plates alone in any well-ventilated dark-room for twenty-four hours. In the absence of such, you can get a light air-tight box, large enough to hold a batch of plates, put in a saucer of chloride of calcium, then your plates, and close down the lid and do not disturb them for two days. The calcium salt absorbs the moisture from the air and becomes wet; the air in its turn takes up the moisture from the plates and they become dry, when they can then be used at once, or packed for future use. The calcium can be dried over a stove and used over and over. It is indeed very convenient and very effectual.

Plates made by the above formula can be developed by any of the published formulæ. I prefer pyro and carbonate of potassium. I have given the way that I do, and I do not see any reason why it cannot be followed by others with equal success.

SOCIETY GOSSIP.

Photographic Society of Philadelphia.—Minutes of the meeting held Wednesday evening, July 2, 1884. The President, Mr. Joseph W. Bates, in the Chair.

In view of the informal character of the summer meetings, on motion, the reading of the minutes of the previous meeting was dispensed with.

The Secretary reported two donations to the Library, from the Scovill Manufacturing Company, viz., Dr. J. M. Eder's "Chemical Effect of the Spectrum," and Mr. H. P. Robinson's "Picture Making by Photography." On motion, a vote of thanks for the same was passed.

It was announced that a blank-book had been provided for the use of the Society, entitled "Where to go with the Camera." Members were requested to send to the Secretary for entry in the book any useful information in regard to photographic societies or subjects.

Circulars were received from the Boston Society of Amateur Photographers, in regard to their Second Annual Exhibition, which it is proposed to hold in Boston during the coming fall, and inviting members of the Society to send specimens of their work.

Mr. Browne called attention to a method mentioned to him by Mr. Galloway C. Morris, of reducing such parts of gelatine negatives as might be too dense. The process consists of rubbing down the dense portions with very fine emery or crocus powder, applied dry, with either the finger or a fine stump. Negatives and prints were shown in which over-dense high lights had been very successfully reduced by this method.

Mr. Bartlett exhibited one of Redding's Improved Pocket Ruby Lanterns, recently brought from England. It consisted of a three-sided lantern, two of the sides being covered with a translucent ruby fabric, and the third being made of tin, which served as a reflector. The top and bottom pieces were tin, the light being supplied by a short, thick candle. When not in use the top and bottom are removed, and with the three sides folded, it occupies about as much space as a pocket note-book.

Several members showed specimens of their recent work, among which were some fine figure-pieces by Mr. Geo. B. Wood.

Adjourned.

ROBERT S. REDFIELD, Secretary.

GERMAN PHOTOGRAPHIC SOCIETY OF NEW YORK.—Regular meeting of the So-

ciety on June 13, the President, Mr. Th. Gubelman, in the Chair.

Received, with thanks, St. Louis Photographer, from January, 1883, to June, 1884, Anthony's Bulletin, and PHILADELPHIA PHOTOGRAPHER.

Mr. Jahr, Chairman of the Literary Committee, announced the subject as "Instantaneous Views."

Mr. Gubelman: For making instantaneous street or marine views, I employ exclusively Dallmeyer's rapid rectilinear lenses with medium to smallest stop, with what success, you can see from these specimens. I find street scenes to be easier than water scenes; for the former I prefer a slightly cloudy sky, because it will give a softer picture by avoiding the heavy shadows, and does not need any more time; in marine views the water itself reflects so much light everywhere, as to lessen the heavy contrasts. In putting my camera up for street views, I never omit to use the level in order to get my lines straight, and never use a swing-back; in fact, my camera has none. Then I do not lose any time in focussing, as I know exactly how far I have to pull my bellows, by marks on the platform for every particular lens. On top of the camera in front, are two little nails at an equal distance from the centre, which correspond with the size of the plate. On the back, exactly in the centre, is a little ring (screw-eye) through which I only need to look in order to see the field within the two nails, which will make my picture. This arrangement is essential with moving objects like a ship, as after my instrument is up and the slide drawn, I have only to look through the screw-eye, and as soon as the ship is in the centre and suitable in size, I can shoot away. In case I am on board of a tug or steamboat, the difficulty is to catch the picture just when it is neither too high nor too low; but a wire frame on the front top will make it possible to get it always correct in the centre. It is of great importance to have a good shutter. A drop shutter is not quick enough without rubber straps, which are apt to shake the camera. In the one I use, a spring moves two cutouts in opposite directions past the lens, thus neutralizing each other's force, and can be adjusted to any rapidity. A rubber bulb and hose set the spring free. I estimate my time of exposure from $\frac{1}{100}$ to $\frac{1}{200}$ th second. The shutter is on the back of the lens, and I believe that I may get a little more exposure or light on the plate than if the shutter was in front. Also any strange light that may come through the opening from the straps or elsewhere is excluded.

Now as to developing. There are so many good developers recommended that it is difficult to select one as the best. However, I use with success the following formula:

Stock Solution.

Carbonate of Soda,		25 grs.
Sulphite of Soda, .		4 grs.
Water.		1 oz.

For use, take four grains of dry pyrogallic acid to every three ounces of the stock solution. I use the pyro always dry, as a solution of it necessitates an addition of acid, and acid restrains. It may be said that the quantity is small, but you must remember the brief time I could give my plate, so that I cannot afford to lose anything, however little.

For under-exposure a little carbonate of soda is added, for over-exposure bromide of potassium, and I endeavor to avoid an intensifier. To get an A 1 negative, you have to give correct time. You can doctor a negative. You can get a fair negative from a plate that was much overtimed, but hardly a perfect one. If you value a negative, never strengthen it; but, if necessary, take weak mercury and ammonia and plenty of water.

Mr. Jahr: Mr. Gubelman, who in his line is undoubtedly one of the best photographers we have here in America, has given us some of his great experience, for which he deserves our thanks. The sharpness of his instantaneous pictures speaks for his shutter, the fine chemical effect for his manipulating, and the selection of objects for his artistic eye. In not using a swingback outdoors, he is correct; but in portrait work it is sometimes indispensable. I would recommend his way of developing, too, if it was not so difficult to get the right amount of pyro at a guess. It takes certainly much practice, for which reason 1

prefer the solution; but I do not think a formula good which mixes pyro, sulphite of soda, and citric acid, in water together, as the common sulphite of soda is usually alkaline-it contains a considerable amount of carbonate of soda. To neutralize that, it takes too much citric acid, which forms citrate of soda, which is one of the best restrainers we have, consequently we have to give more time. I take thirty grains of citric acid or thirty minims of nitric acid to twelve ounces of water and one ounce of pyro, and keep the sulphite of soda with the ammonia or carbonate of soda, whatever you may use. Each ounce of this developer contains one or two grains of pyro and one-twentieth to one-thirtieth grain of citric acid, a quantity too small to have any restraining effect.

The mercury intensifier is much abused. Steward Wadley has collodion negatives from 1861, which were treated with it, and they have not changed yet.

Mr. Esselborn: That Mr. Gubelman has his shutter back of the lens is certainly better than in front, but I think it impossible that it gives him more light on his plate. The shutter is open for a certain time, and a certain amount of light passes, no matter where the shutter is placed.

After Mr. Nagel had shown a number of instantaneous horse pictures, taken with Steinheil's aplanatic, which were liked very much, the meeting adjourned.

LUDWIG SCHILL, Secretary.

THE PHILADELPHIA AMATEUR PHOTOGRAPHIC CLUB.—At a late meeting of the Club, the Executive Committee reported that the "printing room" was ready for use, and that by Friday, June 20, the camera for enlarging or reducing negatives would be ready and in the Club room. It

is intended, with this camera, to make a

negative of from 4 x 5 to 8 x 10 inclusive.

G. W. PEARSON,

Secretary.

THE ILLINOIS STATE PHOTOGRAPHERS' Association seems to be moving in a good direction, and when it gets settled down to real solid work, it will, no doubt, accomplish a good deal for the growth of our art. Several meetings have been held, at which the constitution has been properly tinkered,

and a very pleasant visit was made recently by the Association to Elgin, where a number of Chicago photographers met the amateurs and practical workmen of Elgin, and had a pleasant time. A number of addresses were made, and pleasant intercourse had with each other by those present. One good thought was advanced by a lawyer who addressed the meeting. He said that "lawyers took mental pictures to present to the jury a photograph of the character, while the artist before him photographed only the features. Lawyers transfer their views to the court; yours are diffused all over the world." In closing, he said: "I am glad to see you together. You must be a studious people to bring this art to its present perfection. Any profession that is advancing, requires talent in its members. You are acting, thinking men." The visit included a day and evening. Several hours were spent in view-taking, professionals and amateurs alike levelling their instruments at groups of beings variously placed for most striking effects. Many charming views were secured. After which, experiments were made with different dry plates by electricity at the gallery of Mr. G. H. Sherman. Six varieties of plates were used. After this pleasant meeting it was resolved to hold the next one at Cincinnati during the session of the National Convention. These meetings and greetings cannot but bring good for the cause.

PERTAINING TO THE



NOW FOR CINCINNATI.

There are only a few days remaining in which to complete our arrangements for the coming Convention to be held in Cincinnati July 29th. In this time let every one make preparation for the grand event that will surely eclipse all former efforts.

Secretary Weingartner is daily besieged with letters from photographers, dealers, and manufacturers engaging space; and new members are being added to the list every day. The indications are that the Convention of 1884 will be unequalled both as an exhibition of artistic photography and also as a promoter of interest and good-will among the fraternity.

I would urge that this invitation be responded to by all sorts and conditions of photographers-especially would I advise those of you who are young and inexperienced in the profession to be present, that by study and comparison you may gain ideas, and encouragement to renew your efforts in making first-class pictures. Do not be afraid to exhibit your work-the best you can make, and submit it to the criticisms of others, thereby gaining more instruction in a few days than you could at home, alone, in several months. Not only will you advance in a photographic way, but the change of air, the fine exhibition, the intercourse among your fellow-laborers, and the little respite from the tedious and perplexing routine of every-day life behind the camera will send you back to your native skylight, not only a wiser and better man, but one with a more healthful and buoyant spirit, that will infuse sprightliness and enthusiasm into your subjects which even chronic dyspeptics will be unable to withstand.

The Secretary is alive to the requirements of the occasion, and will leave nothing undone that will conduce to the welfare of the Association or the pleasure and convenience of the participants. There will be excursions to various points of interest in and about Cincinnati. The hotel accommodations are tirst-class and very moderate in price; in fact, everything seems to indicate a grand success. Facilitate the duties of the Treasurer by sending on your annual dues before the Convention.

Persons desirous of becoming members have no initiation fee to pay other than the annual membership fee of two dollars, which should be forwarded (with name and address) at once to Treasurer W. A. Arm-

strong, Milwaukee, Wis., or to Secretary Weingartner, of Cincinnati.

J. H. KENT, President of P. A. of A.

THE PHOTOGRAPHERS' CONVENTION, TO BE HELD IN MUSIC HALL, CINCINNATI, O., JULY 29 TO AUGUST 2, 1884.

Special Railroad Rates have been obtained for the above occasion from the following roads:

Chesapeake & Ohio.

Cincinnati, Hamilton & Dayton.

Cincinnati, Indianapolis, St. Louis & Chicago.

Cincinnati, New Orleans & Texas Pacific. Cincinnati, Washington & Baltimore.

Cleveland, Columbus, Cincinnati & Indianapolis.

Kentucky Central.

Louisville & Nashville.

New York, Pennsylvania & Ohio.

Ohio & Mississippi.

To secure the advantage of these reduced rates, members should write the undersigned for certificates, as certain rules laid down by the railroad companies must be complied with before reduction is granted. Some of the lines entering Cincinnati will sell on presentation of certificate, which can be obtained from the undersigned, round trip local tickets on a basis of rates at four cents per mile, counting the distance one way.

Other lines will return delegates to local points at the rate of one cent per mile on certificates furnished by undersigned, which must, however, be procured by the members before leaving their homes, so that the ticket agent at starting point can endorse thereon that regular rate had been paid for going passage.

The Pittsburg, Cincinnati & St. Louis Railway Company (Pan-Handle Route), operating the following-roads:

Chartiers Railway,

Pittsburg, Wheeling & Kentucky Rail-road,

Cincinnati & Muskingum Valley Railroad, Little Miami Railroad,

Columbus, Chicago & Indianapolis Central Railway,

will sell excursion tickets (both ways) at the rate of four cents per mile, one way.

Tickets will be good two days before opening of the Convention, and three days after close of the Convention.

For certificates, address

LEO. WEINGARTNER,

Secretary of P. A. of A.
COR. SIXTH AND CENTRAL AVE., CINCINNATI, O.

ANOTHER EXHIBITION.

CAMBRIDGE, MASS., July 10, 1884.

DEAR SIR: Enclosed find prospectus for our next Exhibition, which we shall be glad to have you make such mention of in the PHILADELPHIA PHOTOGRAPHER as you may see fit.

There will also be provision made for the exhibition of prints not intended for competition, either by desire or ineligibility of the maker. We intend to circulate these invitations as largely as possible, and wish to make the Exhibition a grand success.

Yours truly,
John H. Thurston,
Secretary.

BOSTON SOCIETY OF AMATEUR PHOTOGRAPHERS.

DEAR SIN: With this we send you a copy of the rules governing the Second Annual Competitive Exhibition of this Society, and ask your assistance to make it an interesting and representative collection of the photographic work of to-day.

Rule II., admitting only those who are members of photographic societies, is not intended to debar any amateur worker, for if they are not near a society we will be glad to correspond with them in regard to becoming associate or corresponding members of this one.

The Exhibition will be held in one of the art galleries in this city, and will be open to the public for several days.

Those who intend to send prints are requested to inform the Secretary as early as possible, so that he may forward particulars as to date, etc., as soon as decided upon.

The names of any amateur photographers

who would probably wish to contribute are also desired.

Further information if desired may be obtained by addressing the Secretary,

JOHN H. THURSTON, Cambridge, Mass.

Boston, June 2, 1884.

The Boston Society of Amateur Photographers has adopted the following rules to govern its Second Annual Competitive Exhibition, which will be held some time during the coming fall:

Rule I. The Hanging Committee reserves the right to reject all, or portions, of any contributions.

Rule II. Members of any photographic society (either active, honorary, or corresponding members) are invited to contribute, and with the exception of Classes 6, 7, 8, 21, 22, 23, and 24, professionals as well as amateurs may enter in competition,

Rule III. Each print must be marked on the back with the name of the contributor. or a private mark or character which has been registered with the Secretary, and accompanied by a tag filled out, and numbered to correspond. Tags will be furnished by the Society in quantities as desired, and will be as follows:

Subject,
Exhibitor,
Lens,
Plate,
Entered in Class,

Rule IV. No prints will be received later than three days before the opening of the Exhibition.

Rule V. The prize to be awarded in each class shall be the Diploma of the Society.

Rule VI. If the best print in any class, in the estimation of the judges, is not worthy of a Diploma, none will be given.

Rule VII. No prints entered at the last Annual Exhibition will be admitted for competition in this.

The following classification of subjects has been made:

Landscapes.

Class.

- 1. General Landscapes.
- 2. Cloud Effects.
- 3. Snow Effects.

Seascapes.

- 4. Surf.
- 5. Sail.

Portraits.

- 6. Full Figures.
- 7. Heads.
- 8. Groups.

Miscellaneous.

- 9. Animals.
- 10. Flowers.
- 11. Trees.
- 12. Transparencies.
- 13. Lantern Slides.
- 14. Microscopic.
- 15. Stereoscopic.
- 16. Machinery.
- Manufactured Objects other than Machinery.
- 18. Copies.

Architectural.

- 19. Exteriors.
- 20. Interiors.

Composition.

On the following subjects only:

- 21. Haymaking.
- 22. Lone Fisherman.
- 23. Happiness.
- 24. Indecision.
- 25. Best Entire Collection.

ABOUT AMATEURS.

As many amateurs are overstepping the bounds a little and encroaching on the professional photographer, I would like to give a little of my own experience, and ask if there is no remedy for the evil of which it treats. The firm with which I am connected makes a specialty of instantaneous work on moving objects, and, I believe, makes negatives with about as short an exposure as any one else has ever done. About two months or so ago, it became necessary to photograph a gentleman riding a bicycle down the steps of the Capitol, at Washington, and owing to certain controlling circumstances the camera had to be placed very near the object to be photographed. Thus we were obliged to contend with the two opposing facts, that a near object requires a longer exposure, while at the same time, a near moving object ought to have a shorter exposure than a distant one, in order to prevent blurring. These facts are only mentioned to show that special care and trouble had to be taken, and more than usual time used in preparing, etc. A shutter worked by a very quick rubber band, which was quite fast enough to make good views from moving trains, was not quick enough to catch the rapid motion of this descending bicycle. A more rapid shutter than could be found for sale had to be constructed.

The negatives were made successfully and boudoir-size prints issued from them; we expected to make our profit by selling the pictures as a record of a remarkable bicycle feat, but in order to do so, we were obliged to enter into an agreement with the bicyclist to retail them at thirty-five cents each. After a few were issued, the other interested party, the bicyclist, came and told us that he had several friends who were amateur photographers, and they all said that thirtyfive cents was too much for that size photograph, they were not worth more than fifteen cents; and a stockdealer here offered to print all he wanted for eight cents each, and use the same maroon gold bevel-edge mounts that we were using. We, of course, reasoned with him to the best of our ability, and he appeared satisfied. A few days later an amateur told a friend of ours that he did not think we would sell many of those prints at thirty-five cents, as they were not worth more than twenty-five cents, and a good profit could be made on them at that price.

Again, after that, our friend, the bicyclist, came back. Some amateur had been at him again; this time he said that he was afraid the price was too high, and if we would let him have the negatives some of his friends would print them for eight cents. We told him that we would immediately stop printing them, and he could get his friend or anyone else to make his negatives and have all the eight-cent prints made he wanted to, but we would keep our negatives. Shortly afterwards we were notified by him to continue our printing, and have done so ever since.

In this particular instance we happened to have a remedy, in the fact that the subject was one too difficult for most amateurs to undertake; but this does not always occur, and it is true that many of them who know how to print will make prints and sell them at the bare cost of the materials, for the questionable honor of having it said that they made the photograph.

Another thing, there are in this city some amateurs, who, although they buy in very small quantities, get a larger discount on the stock they use than many photographers can get, and that too from one of the largest stockdealers in the Atlantic States. Is there no remedy for these evils?

HARRY PLATT.

A DISCUSSION ON PRICES.

(Continued from page 209.)

VII.—TO BE CONTINUED UNTIL THERE IS A REFORMATION.

THE good work goes on. Photographers are awakening. They will work up the subject of advance among themselves as they chat together at Cincinnati, and the result will be a general rise of prices in the fall. Get ready. To help you, we have issued the promised leaflet, and will send a sample free. It contains a scale of prices from twenty States-some higher, the most of them lower, than you get. It is accompanied by many reasons why you should advance your prices, and why the public should agree. In fact, it is a photographic pow-wow with the public, and you should put it into the hands of everyone you can, for your own good. Further particulars on the cover of the leaflet. It is copyrighted to secure its use to those who pay for it.

June number of PHILADELPHIA PHOTOGRAPHER received this A.M. Reading "Discussion on Prices" I notice Brother Hearn's; good for him, I say. But let me inform you, Mr. Wilson, that I hold in my possession a Cheap John circular, far below Hartley, of Chicago, whom you have said so much against:

"HEARN, PHOTOGRAPHER."

"514 Congress Street. Branches: Old Orchard and Bridgton, Me.; Bethlehem, White Mountains, N. H.

"PORTLAND, MB., April, 1884.

"Our New Plan in selling or letting out

clubs is as follows: We sell fourteen club tickets for twelve dollars to the agent who starts the club. Twelve of those tickets you dispose of at one dollar each, thus getting back your twelve dollars which you have paid for fourteen tickets, with two extra tickets besides."

And a lot more lingo too numerous to mention at present. You can get one of the circulars if you get a friend to write for one to be agent for his club rates. I am going to keep mine; I can do some good with it, I think. Mr. Hearn puts his books, his plates, etc., on the market for photographers to buy, and then claims he is for high prices, and cuts the very same photographers' throats. I could write more, but I have not the time to do so.

Yours for right on all sides, J. PAUL MARTIN.

Boone, Iowa.

I am very glad to read your efforts to raise prices, and certainly hope something will be done during our coming Convention which will do the fraternity good and help to put prices where they should be. May success attend all efforts in this direction, and everyone who has any respect for themselves or art, stand firm for living prices and good work.

Mrs. E. N. Lockwood.

RIPON, WIS.

I am glad to see a movement made in the right direction, as it is very much needed. My prices range: for cabinets, three dollars, and for cards, two dollars per dozen. There are places in the city where they are much less; any photographer who works for less is simply starving out the business, or his work is not worth the price he asks for it, and degrades photography altogether. Experience has taught me that the lower you cut your prices the less people estimate your pictures. Using their own language, they cannot be worth much when they are so cheap. Yet, when old-established photographers undervalue their work, it is hard for a man like myself, a new beginner, to keep up the prices. I think that the very lowest figure that cabinets ought to be offered for should be five dollars per dozen, and cards ought to bring two dollars per dozen. Of course, I am speaking for the middle-class galleries. In charging a reasonable price we would have less hard labor and more profit. Hoping that I have not intruded too much on your time, and wishing you every success, I remain,

Yours, etc.,

H. C. Schaeffer.

ST. Louis, Mo.

We are in receipt of your letter; will say that we are very happy to make a reply in that direction, as we have thought there ought to be a fixed and established price. Our prices last year for cards were three dollars per dozen; cabinets, four dollars. This year we advanced our prices on cabinets to five dollars per dozen. Whole-size pictures, three dollars.

Truly yours,
Nickerson & Smith.

Province town, Mass.
[Good for the advance.—Ed.]

I am careful in my work and do the best I can. Have all I can do; consequently, do not care what other photographers charge. There is one thing certain, I can tell the Cheap John photographers by the "cut of their coat," and if it happens that I get in conversation with one of them, I find their education and principles as small as the price they ask for their work, and no doubt their work is often not worth the money they get for it.

Most respectfully,
J. H. DAMPF.

CORNING, N. Y.

Business is and has been very good since the last Convention, which was a great boon to us; it seemed to have a good effect on us all; first, in making us try to better our work, and, secondly, the public have taken more interest in photography. Cheap Johnism is raging here the same as elsewhere, but it has little effect on me. I demand living prices and will not work for less. May your effort in securing higher prices to the fraternity prove a success. I am,

Yours respectfully,

S. L. STEIN.

MILWAUKEE, WIS.

I am sorry to say that my efforts to get the Detroit photographers into a more amiable feeling toward each other, with a view to the advancement in price for work, have failed. The low prices in the city affect the country photographers, especially those within a certain distance of the city, and they complain wofully, and perhaps they are right, but I remember the time of the old bromide war, when the city gave liberally, and the country photographers, who had no faith in the good fight, said, if won, they would not be found backward in making all things straight, but after the fight was won and they were asked to help pay money that had been borrowed, one man in the State of Michigan outside the city sent in a solitary fifty-cent scrip. It is something like tit for tat. However, I am very sorry that it could not have been managed. \$1.50 to \$2.50 per dozen for cabinets is very bad. Yours fraternally,

JEX. BARDWELL.

DETROIT, MICH

I see so much said about prices in your magazine that I will try and give you an idea of what we have done here. On April 24, 1884, we formed what is known as the Photographers' Association of Jacksonville, Ill., for the purpose of establishing prices at a fixed rate. The prices agreed upon were as follows: cards, \$3 per doz.; cabinets, \$5 per doz.; panels, \$6 per doz.; 8×10 , \$10 per doz.; $7\frac{1}{2} \times 13\frac{1}{2}$ panels, \$15. We have a printed price-list put up in our studios, with the name of each photographer here signed to it. Since our introduction of new prices we find that it works admirably well. Once each month we meet and discuss topics such as come up before the meeting. If this is of any value, you may publish it. Fraternally yours,

J. W. DENTON.

JACKSONVILLE, ILL.

The question of prices is a very difficult one to handle. Every one has the undoubted right to charge what he sees fit, so long as he pays one hundred cents on the dollar of what he owes. It must be very humiliating to any photographer to advertise himself as inferior, as an artist, by cutting prices to retain business, for that is simply what it means in most cases; and the unfortunate part of it is that he will never be able to regain the advantage thus lost with any

surety of making a permanent success. There is too much competition everywhere, and some will have to succumb to the inevitable failure which is sure to come sooner or later where such low rates are in vogue. There is a class who cannot afford to pay high prices in all communities, and for this class the cheap photographs are legitimate; and there are also those who appreciate and are able to pay for a good and finely finished picture, and to the photographer who meets that want with artistic work, and at a reasonable price, his place is secure, provided he is a man of culture and refinement, gentlemanly and courteous in all his dealings, and conducts his business on sound business principles.

CH. TOMLINSON.

ELMIRA, N. Y.

I have been thinking a great deal about your "price" question. That is a move in the right direction. The example of the Syracuse photographers ought to give backbone to the rest of us. Though I feel that I might possibly be classed in the seventh or tenth class, at least in my estimation, yet I would vote the biggest vote I could cast (and I am six feet tall) for such classification all over the Union. Of course it would have many disadvantages, doubtless, but at the same time it would give an "excellence" to strive for. We poor but earnest "minnies" would do our best to reach the plane the "whales" are occupying; while at the same time we would be given a place in the rank and file, which we could point to with pleasure. Law, medicine, literature, theology, art, all have their degrees, and men must possess certain qualifications before they have degrees conferred upon them. Photography is no sneaking, half-starved profession, that it must stand forever aside and have the everlasting stigma of "machine art" thrust upon it. A conference of degrees implies a standard; that standard, a head whence issue the highest knowledge of the art, and the proper adjustment of the means of conferring degrees and titles. Let this be accomplished, and put it in proper shape before the public, and then the matter of prices will regulate itself. Much depends on the community in which a person does business as regards prices. A first-class

doctor or lawyer commands fees in proportion to the amount of skill and brains he possesses; in short, fees as a rule represent and are parallel to the amount of skill and brains a given individual has: good pay, good service, and until the mass of photographers are better educated in photographic chemistry and photo. fine art, simply putting up prices is not laudable. It is only too true, that those who are making first-rate and superior work are, through selfishness and jealousy, cutting prices that is nothing short of ridiculous. People of sense see that jealousy is generally the cause of such cutting, and never look on approvingly. The public never demand low prices for good work, only a certain class, never of much good to most galleries, twist the life out of the eagle on a twenty-five cent piece. Ask some of the Harrisburg, Pa., photographers what they think of cutting prices, and they will show you a scar on their reputations' fingers deeper than silver-stains. pocket-books have the dyspepsia, or marasmus bad enough, and no doctor but that of experience could do them any good, and, fortunately or unfortunately, that doctor is of the "old school," and believes in physic. They are tame enough now. There is a clear case of the superiority of talent well applied over mere pretension coupled with jealousy, and I am sorry to say that the panic struck the very foremost artists the hardest, but now old sores are healing, and things are steadying up. With best wishes for your continued success, I am,

Yours truly,

JOHN K. MILLER.

Elizabethtown, Pa.

SOME PLAIN TALK.

Dress your hair and arrange the toilet about your neck just as you wish to appear. Avoid all strong contrasts of black and white, dress with taste, and your portrait will always look well.

Please remember, that I have not the physical or financial ability to try experiments on your various toilets, unless you are willing to pay for the extra sittings.

It will be to your advantage to leave your position to me, unless you are the better

educated in art; then I will gladly defer to your superior judgment.

Under all circumstances I will endeavor to please you, and to give the very best possible result in position, lighting, expression, and finish.

My prices are more than moderate for the class of work I give you, and I trust you will acquiesce in my business rules.

All work is finished as rapidly as possible; there are no unnecessary delays.

C. Tomlinson.

116 BALDWIN STREET, ELMIRA, N. Y.

GERMAN CORRESPONDENCE.

Visit of Mr. Kilburn to Berlin—Old Stories and New Inventions—Practical Experience with Azaline Plates—The Second Silver Bath in Eosin Collodion Process— Photography in the German Navy.

Last week we were favored with a visit from our mutual friend, Mr. Kilburn, of Littleton, N. H., who made known to his collegues of the Society for the Promotion of Photography, an enlarging process which met with much favor. In the year 1872, Gænsli, a photographer, came to New York in order, to make known a discovery of his partner Guetzlass. This discovery was a method of shortening the time of exposure by the use of a certain medium, which medium was a yellow fluid, the details of which were published in your journal for 1872. Time passed on and this discovery was forgotten, because no practical results flowed therefrom.

Now I only refer to this to answer certain objections which have been urged against the priority of my discovery. I have followed up in the line which Guetzlass began, and while I acknowledge him as my predecessor in this direction, I do maintain that my process and his are as diametrically opposed as heaven and earth. His was a method of sensitizing after exposure, while my principle involved a method for making bromide of silver sensitive to the socalled non-actinic colored ray, by the addition of bodies which absorb those rays. One might as well compare a Voigtlander portrait-lens to a telescope, because a brass tube is used for mounting both.

I have recently been making some experiments with azaline for coloring gelatine plates, and have achieved some surprising results. The results are better than when eosin was employed. I subjoin in tabular form, which will show the comparison between the two:

Color. Wet Eosin Plate. Dry Gelatine Eosin. Dry Azalin Plate. a. Naples yellow. The brightest. A little darker than b. Chrome yellow. Naples yellow. c. Ochre. Black. Black. Gray. d. Dark red. Black. Black, Black. Somewhat darker than e. Rose. Darker than chrome. Like chrome. chrome. Brighter than f. Bright green. Like chrome. Darker than chrome. chrome. g. Dark green. Gray. Grav. Dark gray. Dark gray. h. Cobalt. Like chrome. Dark gray. i. Ultramarine. Black. Like chrome. Black.

According to this, with wet as with dry eosin plates, the greens operate too strongly -that which was darker than chrome yellow appeared brighter in the photograph. Further, the ochre acted insufficiently; rose madder, on the contrary, with the dry better than with the wet. Very striking was the difference of the two plates for blue; this color appearing on the wet plates decidedly dark; on the dry, bright as chrome yellow. The wet eosin plate therefore gives a truer relation of colors than the dry; far more marked is the behavior of the azaline dry plates, not alone by their sensitiveness for reproducing red, but also by the proper representation of the blue and the green.

Herr Quidde, in experimenting with ordinary gelatine plates, and azaline with plates in the reproduction of oil paintings, remarks: The first impression showed harsh white lights without any modulations, together with pitch-black shadows without details; certain portions of the picture did not appear at all, looking like an over-exposed image. It was quite different with the second exposure, when the right relation of shade of color was effected, full of modulations and detail and transparent shadows. In place of the dense black, flat shadows of the first, we see detail and nice gradation of light and shade, clearness and sharpness.

The object of the second silver bath in the eosin collodion process, is to prevent the for-

manner. I have therefore added it to this second bath with great advantage; to every 100 c.cm. of bath, 20 grammes of nitrate of ammonia. In the first bath, nitrate of ammonia is not only useless, but in many cases operates against the sensitiveness of the bath.

mation of spots. These spots are occasioned

by an excess of nitric acid. Recent experi-

ments have demonstrated to me, that the

eosin silver formed in the first bath is very

soluble in ammonia, and that the addition of

this body to the second bath favors the solu-

tion of the eosin silver in a very remarkable

Photography is playing an important role in the German Navy. The outlines of coasts are perhaps of as great importance to seamen in navigating the ship as charts for sailing. Such outlines have hitherto been drawn, and hence their accuracy depended greatly upon the skill of the draughtsman, and frequently left much to be desired. The thought occurred to make use of photography, by which even instantaneous views could be taken with our highly sensitive dry plates, of sailing ships. Last year experiments were made in this direction by the Imperial Navy, but no favorable results were secured. An ordinary landscape camera with tripod and a short focus lens were employed-sufficient for the land, no doubt, but impractical on board ship, where every motion of the vessel is appparent. Moreover, we must recollect that the camera is not under the control of an experienced hand, but operated by seamen without practical experience. The images obtained were too small, not sharp, over or under-exposed. Under such circumstances the outlines obtained were often as long as broad and hence

of no practical use. There was too much foreground and sky. It is clear that since the views must be taken at some distance, a lens of long focus is demanded.

Under these conditions I began to devise an apparatus specially for taking the coast outline upon a moving ship. I made use of a flat camera with a long focus lens, a Steinheil aplanatic of 54 cm. focus. To prevent the motion of the ship from affecting the camera, it was fastened to a four-foot-long upright having a cubical projection at the top, this rested on a perforated hollow socket; the upright, which passed through the hole or the cube, carried a hook to which a weight was attached. The socket rested upon a stand screwed down upon the deck of the vessel. By means of the heavy weight the rod was kept in an upright position and the camera in a horizontal position. Very great sharpness of the detail was not necessary. A finder was attached to the box, by which the position of the coast upon the plate could be noticed.

Gurny's shutter was used for instan-

taneous work, but it did not always serve the purpose, inasmuch as sudden gusts of wind would occasion an exposure often at the wrong time. Sach's plates were employed with the second smallest stop, which gave very good instantaneous work.

Engineer Smidt, of the Royal Navy, has made himself perfect by laboratory work in the Technical High School. When the weather was cloudy or light bad, a larger stop was used; of course the image was not as sharp, but this did not interfere with the general accuracy demanded. Many plates were, as may be supposed, over-exposed or underexposed, but the general results secured were excellent, when we consider the difficulties which were to be surmounted. Part of the plates were developed on board. I have mentioned this new application of photography inasmuch as it opens a broad field for its usefulness, and these experiments will no doubt lead to others.

H. W. VOGEL.

BERLIN.

Editor's Table.

PICTURES RECEIVED .- From Mr. KUHNS, At-'lanta, Ga., a very carefully made composition picture of the "Gate City Guard at Home." There are about fifty figures in this group, nearly all standing, carefully arranged without any stereotype effect, and excellently photographed. The scene is the interior of the armory, while in one corner in a little circle is an exterior view inserted, making the whole a very pleasant souvenir. Mr. R. Moore, of Seattle, Washington Ty., has favored us with a number of examples of his dry-plate work, showing Mr. Moore to be quite up to the times in the manipulation of this new element in photography. His child-effects are very prettily arranged, and his grouping is carefully done.

Messrs. E. & H. T. Anthony & Co., 591 Broadway, New York, have favored us with a copy of their new catalogue. It is a model of completeness. It contains one hundred and forty pages of closely printed matter the size of the Bulletin, is elaborately illustrated and care-

fully compiled. It seems to include everything that is abreast of the times, in the way of apparatus, accessories, tools, articles of use, etc., pertaining to our art. What adds to its value is an extended table of contents, making it not only a catalogue but a useful book of reference. Its ornamental cover is in keeping with the beauty of the whole.

BEAUTIFUL EXAMPLES OF ENGRAVINGS.—The CROSSCUP & WEST ENGRAVING COMPANY, 702 Chestnut Street, generally well known to our readers by their work and their advertisement, have favored us with some lovely examples of the various processes of engraving which they practise, namely, wood-engraving, photo-engraving, and the Ives process. A sheet containing these examples may be had free from these well-known gentlemen. A large portion of the engravings in the Philadelphia Photographer for the last fifteen years has been done by this house, and we recommend them thoroughly as excellent workmen, and pleasant men to deal

with, besides being moderate in price. Every photographer could get more or less of this work to do if he would push, and make a commission on it. "A word to the wise is sufficient."

THE SUTTER LENS .- One of the attractions of the Cincinnati Exhibition will be a series of these new candidates for public favor made by Mr. Sutter, of Basle, Switzerland, together with some of the wonderful work produced by them. The principal points in the Sutter Lens are wonderful sharpness and softness of definition, flatness of field, and great depth of focus. They have as great rapidity, if not greater than most any other make. Experts declare that they are the most wonderful lens they have ever tested. Messrs. Allen Brothers, of Detroit, Mich., well-known gentlemen, and agents for these new lenses, have received testimonials of the strongest kinds from English and American photographers, including in England Messrs. Lock & WHITFIELD, YORK & SON, and others. It is safe to speak most strongly of these lenses, some of which we have seen, besides examining a variety of the work done by them. Be sure to inquire for them at the Exhibition.

THE SUMMER SCHOOL OF PHOTOGRAPHY AT MOUNTAIN LAKE, MD.—Visitors to the Cincinnati Exhibition, when convenient, will find it to pay them to make a halt at Mountain Lake, and see the workings of the Summer School of Photography under the care of Prof. Himes. We are half looking for a delegation from this quarter to the Cincinnati Convention, since we learned that already the most pleasant fraternal relations has grown out of this pleasant starting of a new enterprise. More shall be said when we are at liberty to speak.

Messrs. Smith & Pattison, 83 & 85 Wabash Avenue, Chicago, have sent us a variety of circulars, which will be duplicated free to any one applying for them. Among the most useful articles which they offer is the Studio Register, which enables the photographer to keep his books systematically. Send for the whole list.

The Crescent City Photographic Stock Supply House is the name given by Mr. Theodore Lilienthal to his new establishment at 121 Canal Street, New Orleans. In addition to this, Mr. Lilienthal's factory and warerooms are at 31 Chartres Street. Mr. Lilienthal expects to be ready for orders by August 1st, and previously to issue his catalogue. His stock department will be under the supervision of Mr. George A. Lauer, who has had nearly twenty years' experience in the business. Mr. Lilienthal

proves himself to be up to the times by putting this important query on the fourth page of his circular letter: "Are you a subscriber to any photographic journal? If not, send me your subscription and keep posted." And we add, choose as the best, The Philadelphia Photographer.

LOOK out for "secret processes." Have nothing to do with any which are offered you for money. They are either old, or they will be made public before very long. Do not bite, lest you be bitten.

About Plate-making. -Several of our subscribers have urgently desired that we should publish formula for the manufacture of dry plates. We have never done much in this direction, for the reason that we do not believe it is good policy for the photographer to manufacture his own plates. However, in order to show our willingness to please all classes, we have persuaded a gentleman whom we know to be skilled in this direction to give us his modus operandi. For this we are indebted to Mr. Ranald Douglass, who will be heard from in another column on this subject.

THE PHOTOGRAPHER IN THE NORTHLAND.—Mr. R. MAYNARD has just returned from a wonderful trip to Queen Charlotte's Island by way of Straits of Georgia, and describes his interesting trip in one of the local papers.

MRS. E. N. LOCKWOOD, Ripon, Wis., favors us with a prettily printed "Anniversary Circular," one year having elapsed since she has been sailing under her own flag. Prosperity seems to have attended her from the beginning.

Mr. C. M. French, Garretsville, Ohio, has one of the most attractive advertisements in the magazine. Not only this, he offers to the public a most attractive article for their use. Several designs have been added to Mr. French's stock of engravings, which will appear from time to time in the advertisement. A new one appears this month. Look out for him at the Convention with his beautiful examples of work.

Mr. G. Gennert, the veteran stockdealer, has removed to No. 54 East Tenth Street, New York, where he has now one of the most complete and beautiful establishments in our line We shall make a visit to Mr. Gennert's presently, after which a full description of his establishment will be given. Meanwhile read his advertisements, and be sure and get all the good out of them. His albumen-paper business alone is now becoming an immensity.

AN OLD STAND FOR SALE.—Our old friend, Mr. ABRAM BOGARDUS, the veteran photographer of 872 Broadway, New York, has taken it into his heart to sell out. His stock of apparatus, negatives of distinguished persons, and the paraphernalia generally must be very valuable, and the opportunity is well worth looking into by those seeking for business.

Kind Words.—If we ever do have a fear that the artistic feeling among photographers is sometimes at too low a grade to appreciate our work, and that the pains we take to push them upward and onward is lost, it is all removed by the comments on us by the press. Here are two examples, the first from Thomas Pray, Jr., Editor of the Manufacturers' Gazette, Boston, Mass. (he is a distinguished amateur photographer), and a second, from the Public Ledger, of Philadelphia, Mr. George W. Child's well-known paper:

"Mr. E. L. Wilson, editor and proprietor of the *Philadelphia Photographer*, one of the best journals published anywhere, moves from his old quarters, 912 Chestnut Street, Philadelphia, to 1125 Chestnut Street, on the first of July. Mr. Wilson publishes photographic prints, makes transparencies from his extensive travels abroad, and is reliable in every way. We wish him all the joy that moving means."

"The Philadelphia Photographer for July, published by Mr. EDWARD L. WILSON, who has removed to 1125 Chestnut Street, has an exceedingly attractive illustration in "Gretchen," a composition picture that fairly deserves to be classed as a work of art. The magazine is full, as usual, of valuable hints to professional and amateur photographers in every branch of the business or art. It is to such journals as the Photographer that the profession and the public are indebted for many of the improvements that have taken place in the art in the last dozen years, for it is a convenient medium of communication between earnest workers, whose hints and suggestions are developed almost as rapidly as their plates, and lead to visible advances, not only by those who serve as pioneers and missionaries, but by all who keep abreast of the literature devoted to their calling."

HUMAN NATURE UNDER THE SKYLIGHT.—An address with the above title was delivered at Freeport, Ill., on June 17th, by Mr. Samuel V. Allen, of that city. A correspondent writes:

The lecturer was introduced to the audience by Prof. Charles C. Snyder, with a few complimentary remarks, and in a short time Mr. Allen was in the midst of his subject. With a preliminary request for indulgence in presenting views of the subject that might at first seem disjointed, the plan and scope of the address were soon laid bare, and the audience saw the speaker surrounded by the different branches of his subject, stretching out into indefinite possibilities on all sides. The embarrassment peculiar to those who only occasionally speak in public was plainly discernible, and it was some minutes before the lecturer really got possession of his audience, but sympathy once established was thoroughly maintained to the close. Under the thin disguise of a humor that was fully appreciated, the various complicated relations of artist and sitter were considered, and many of the problems so intensely interesting to those who visit photographers' studios, came up for The kindly sympathy of the elucidation. speaker with nearly all the classes of sitters was manifest, while the many compliments paid to eminent members of his profession gave force to his remarks. Though the lecture throughout was mostly narrative in its character, and abounded with incidents peculiar to life under the skylight, there was almost an entire absence of anecdotes considered as such. During his lecture the speaker was frequently and heartily applauded. It is to be hoped Mr. Allen can be prevailed on in the next course of High School Lectures to deliver one upon the subject of photography, considered purely from a scientific standpoint. He is an enthusiastic artist, and makes a profound and thorough study of all the technical features of his profession, and such a lecture from him would be of great and practical value to all who-might hear it.

Mr. E. D. Ormsby, of Oakland, Cal., has been interviewed by the *Daily Times'* reporter, and states some interesting facts pertaining to some of his patrons. We are afraid if he did much of this thing he would cause his customers to become suspicious lest he expose their peculiarities.

Mr. C. H. Tonndorff, the "chief" of the stamp-portrait men, has prepared for us a very neat little card for distribution at the Convention, illuminated by our own portrait, which we expect to be busied in giving away while at the Convention. We do not want to forget anybody or slight any one, so applicants will be supplied free. Mr. Tonndorff appears to be doing an immense business in these little things, and no doubt they are going to find their way in many places where photography, as a rule, does not go.

Mr. A. H. Plecker, Lynchburg, Va., generously issues a circular calling all the fraternity

to the Convention at Cincinnati, and announces that the Chesapeake and Ohio Railway will make one fare to the round trip to Cincinnati for the Convention. A reduced rate has also been made from New York by way of the Old Dominion Line of Steamers, and also some of the other roads, particulars of which can be had by referring to Mr. Plecker. Also see Mr. Weingarder's list.

Messrs. Bachrach & Bro., Baltimore, notwithstanding the competition they find there, have been so prosperous as to be enabled to occupy the first floor of their building as an office and reception-room, and connect their other floors with a hydraulic passenger elevator. We are glad to see them prosper.

\$500 will buy building, instruments, furniture, chemicals, etc.; north light, good location, and doing a good business.

F. H. FOLTZ,

Bedford, Pa

What Can I Do?—This is the title of a very touching poem recently read before the New England Woman's Club, the production of our late good friend, Mr. Charles H. Codman, of Boston, a copy of which has been sent us by Mrs. Codman. It is characteristic of its author. The spirit of the poem is found in the following excerpt:

"How can I make this busy world
The better for my living?
How can I make some slight return
For all it is me giving?"

DOCTOR VOGEL'S LETTER .- A pleasant, newsy letter is that of Dr. Vogel. We are always glad to get his useful, practical correspondence, and wish sometimes he would tell a little more about himself. We learn from a private source that in October, when he begins his autumn work at the University at Berlin, where he has been a Professor of Physics and Photography these many years, the Doctor is to have new and splendid quarters, sumptuous, massive, grand, and convenient in every respect. This correspondent truly says, "Dr. Vogel is to be congratulated on this beautiful change from his old quarters, and he deserves it richly, for, aside from his well-merited distinction and celebrity as a professor and a photographer, he is one of those good, large-hearted, cheerful, and kind men, full of the milk of human kindness. May he live long, and may you and I be blessed with his genial friendship for a long time to come. and often be with him." To this last we echo "so be it," and wish the Doctor continued success in his new laboratory. We personally congratulate him on getting out of the old rat-trap which he has borne with during so many years of hard labor.

A Note from Mr. Ives.

PHILADELPHIA, July 10, 1884.

MR. E. L. WILSON.

DEAR SIR: I am sorry to see in your magazine the republication of such a lot of falsehood and nonsense as is contained in the article signed "AD. P. Eggis," and credited to the Paris Moniteur. Eggis states that my process is something entirely different from what it is, and then describes a slightly modified form of what really is my process, and claims it as his own. His talk about the superiority of a stipple to mechanical lining simply proves his ignorance of what has been accomplished in both ways. I commenced with a stipple, almost exactly in the manner described by Eggis as an improvement, and then really did improve by discarding the crayon paper and adopting the method I now employ. No better proof of the quality of my process plates is needed than the fact that they are now in demand for the illustration of some of the highest-class illustrated magazines in the world. Yours truly,

FRED. E. IVES.

We regret that such an oversight as that pointed out by Mr. IVES should occur. We have opportunity to know that he is correct, and would not take one iota from him of his credit as an ingenious inventor. The examples of his work tell better than any argument that he is ahead in this matter, and when others produce as good, it will be time enough for them to put in their claims.

Messrs. Charles Cooper & Co. have favored us with their monthly price-list. Our readers who have not dealt with this firm will find them one of the most pleasant and agreeable connected with our business. They are not exclusively manufacturers of photographic chemicals, by any means, that branch of their business being comparatively a very small one. What they do make is excellent in quality and reliable in every sense, as are the gentlemen themselves. Their drug and medicine business is an immense one, too, and their factories in Newark and New York employ a great many people.

Photography is the name of "a record of the progress of the art sciences," issued in Chicago semi-monthly, by Mr. J. SAWTELLE FORD, at \$3.00 per year. It is neatly printed, and has a good appearance.

Specialties.

MAKE OUT YOUR OWN BILL, and remit cash with your advertisements, or they will not be inserted.

ADVERTISING RATES FOR SPECIALTIES .- Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line-in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations, We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement. Postage-stamps taken.

WE are now located in our four-story and basement, seventy feet deep building. We have a stock of summer accessories on hand, and can deliver backgrounds at short notice. Several new articles, very desirable for summer, ready.

LAFAYETTE W. SEAVEY.
Winth St., 1

216 E. Ninth St., N. Y.

W. F. ASHE, ARTISTIC BACKGROUNDS

ACCESSORIES.

REMOVED TO 68 WEST FOURTH ST.,

4 BLOCKS WEST OF BROADWAY, N. Y.

My new studio is fitted up with all the modern improvements, and the most refined demands from a critical public can be satisfied. A visit to my establishment, which has the largest showroom, containing the greatest amount of stock of any place in the world, will be gratefully appreciated.

I have again added numerous new designs to my great variety of patterns for backgrounds and accessories, and keep also in stock a large quantity of goods for parties to select from, saving time and delay on orders.

FOR SALE IN THE BEST MINING CAMP IN AMERICA .- I have just received into my hands a good photographic outfit and full stock, which must be sold immediately. For particulars,

> J. H. EARDLEY, Address Grocer, Butte City,

Montana Ty.

ROCKWOOD SOLAR PRINTING CO.

17 Union Square, New York.

TIME .- It is our intention that every order received in the morning's mail (when not to be put on stretchers) shall leave this establishment the same day or the following morning. If too late for the morning work, it is sent on the second day. Having our own engine and electric light, we are not at all dependent on the weather.

> GEORGE H. ROCKWOOD, Business Manager.

WILSON'S PHOTOGRAPHICS. **\$4.00.** Post-paid.

THE PLATINOTYPE PROCESS. NOTICE!

Thomas H. McCollin, of Philadelphia, is no longer agent for the sale of materials for

WILLIS'S PLATINOTYPE PROCESS.

Licensees, both amateur and professional, and all who are interested in the process, will please address all orders and communications to Willis & Clements, proprietors of the patents, or to Buchanan, Smedley & Bromley the only authorized general agents for the sale of materials in the United States, 25 North Seventh St., Philadelphia, Pa.

VOGEL'S PROGRESS OF PHOTOGRAPHY. LATEST-BEST-\$3.

S.H.L.OWLYP.A.

No. 18. VIGNETTE No. 18.

The old form of No. 18, Waymouth's Vignette Papers, oval, has been discarded, and a new pear-shaped style is now ready in its place. It is a beautiful piece of gradation and prints perfectly. Price \$1.25 per dozen. For sale by all dealers. See advertisement for all sizes.

No. 18. NOW READY. No. 18.

S. G. NIXON,

PORTRAIT ARTIST,

No. 813 Arch Street, Philadelphia, Pa. CRAYON AND WATER COLOR PORTRAITS.

Solar prints and photographic enlargements furnished and finished in crayon, Indian ink, or water-colors. Photographic coloring on plain or albumenized paper and porcelain. Copies finished in Indian ink and water colors.

References and terms on application.



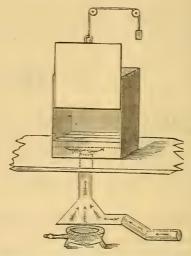
WILSON'S PHOTOGRAPHICS

Holds up to view all about manipulation, photographic art, posing, lighting, etc. Nearly 1000 sold. See advertisements and testimonials.

84.00

\$4.00

ADDRESS T. W. POWER, N. Y., Secretary of Association of Operative Protegraphers of New York City, for operators, printers, and retouchers, 392 Bowery, or 487 Eighth Avenue.



WILSON'S PHOTOGRAPHICS.

All about emulsion work and plate making-a whole big chapter. See index.

\$4.00

Buy it.

\$4.00

PORTRAITS IN CRAYON.

The new book by E. Long, on the art of making portraits in crayon on solar enlargements, covers the entire ground, and is sold for the low price of fifty cents. For sale by

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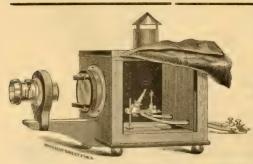
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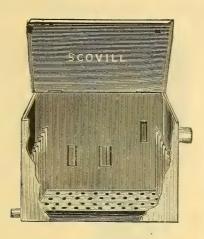
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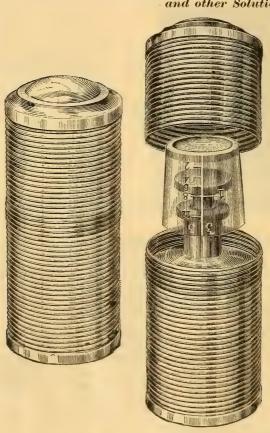
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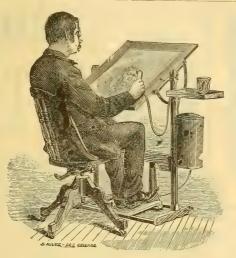
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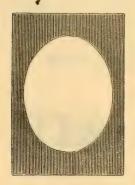
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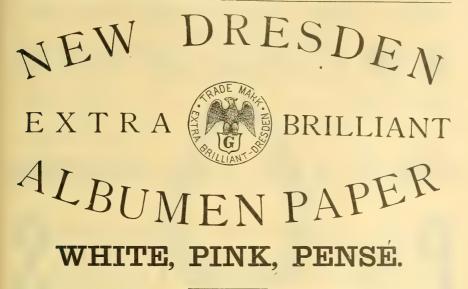
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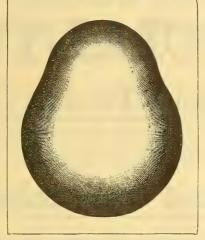
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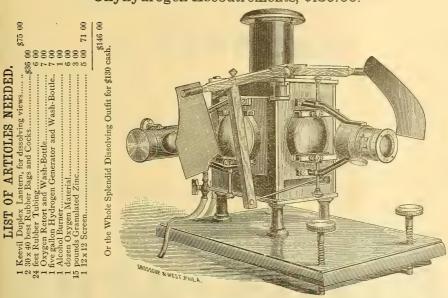
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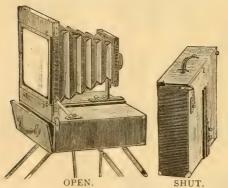
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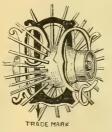
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CARRETTSVILLE, DHIC

TESTIMONIALS.

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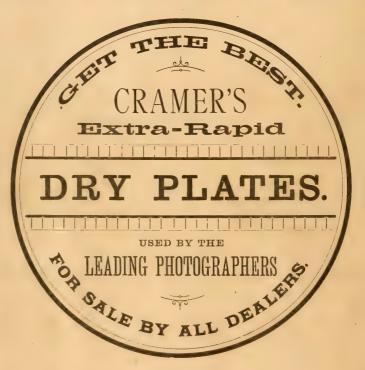
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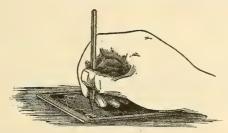
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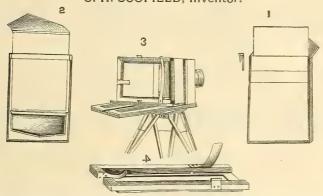
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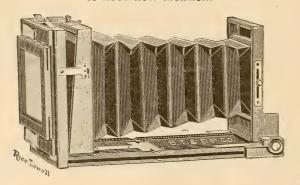
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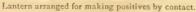
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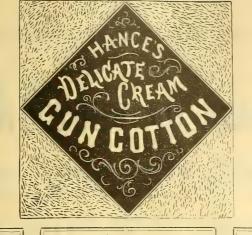




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CINCINNATI CONVENTION CORRESPONDENCE.

CINCINNATI, July 29, 1884.

I ARRIVED in Cincinnati early Tuesday morning, July 29, and was not long in reaching Music Hall, where preparations were being made for the Fifth Annual Convention and Exhibition of the Photographers' Association of America.

Paying my two dollars at the door to Treasurer Armstrong, I received a whiteribboned badge, garnished and printed in gold, and became at once privileged to share all the rites and rights and ceremonies within the vast mysteries of the hall beyond.

I entered. What an overwhelming sight! Hundreds of hammers were busied there, impelled by heated and coatless individuals who seemed to feel that there would be another flood, or a second riot, if their work was not ended ere night came on.

But of the exhibition, more anon.

Let us to the Convention chamber at once.

A vast apartment, devoted to the interests of the inner man when the exhibitions of Art are going on, had been provided with seats, and was now transformed into a chamber of Science. One side opened into its garden appendage where were all the accessories of a tropical pleasure placefountains, rills, plants, lovely promenades, and what not to make up a scene of beauty. Between it and the impromptu auditorium a large platform was erected. On this sat the presiding officer and his staff, supported by a series of picturesque backgrounds produced by the deft hands of Ashe, and Seavey, and Spurgin. Beyond these the staging continued, covered by a tremendous curved skylight. Here it was planned to have practical photographic demonstrations, by masters in the art, from time to time.

When I entered this apartment of art, science, and beauty, I found that the gavel of President J. H. Kent had already sounded, and that the Convention had been formally opened. The address of welcome of Secretary Weingartner was read with neatness and despatch.

President Kent then followed with one of his original and happy impromptu addresses as follows:

Gentlemen of the Association: I should say Ladies and Gentlemen (as I see there are some ladies in the audience), I have to make an acknowledgment in opening this Convention of a weakness I possess. I

never possessed but one, but the one I speak of has troubled me all my life, and I regret to say that it does not decrease with my increasing years; I refer to my inability to remember names and faces. I am able to remember the names of my most intimate friends; for instance, I can remember our friend and coworker here, Mr. Ryder, I think his name is, and whom I shall never forget; also I can remember our friend Weingartner; and our distinguished friend here Mr. Wilson; he, I think, will never forget me-if he can help it. And here, too, is our distinguished and vigilant ex-President, who has so peculiar a name, I don't recollect it at this time. I remember to have read it in the Bible, I think, when I was younger. I believe it comes somewhere before Judges-a position I trust he will never occupy. I make these remarks as an excuse to ask each one of you when you arise to address the Convention, or to make an elaborate speech, to announce distinctly your name and address, rather than to place dependence on my memory, and if I should chance to call Brown, Smith, or Smith, Brown, I trust you will not take exception to it, and remember that your identity is not impaired by the mistake. Without further remarks we will now proceed to business.

By this time nearly four hundred had become seated in the hall, and the number was being continually added to.

The routine business being called, the roll-call and reading of the minutes were dispensed with.

The Committee on the "Progress of Photography," owing to the fact that its membership was scattered, had not organized, and was unable, therefore, to make a united report. Reports were received separately, therefore, from two of its members, Messrs. Gentile and Taylor.

Mr. Gentile read his as follows:

The President of our Association has informed me that Mr. J. Traill Taylor has resigned his position on the Committee appointed at the Milwaukee Convention to report on the Progress of Photography, and that he would expect me to make a report or get the Committee to do so.

As the Committee has had no opportunity to confer together or make a joint report, I will endeavor to the best of my ability to make an individual report which I hope will only be supplemental to those by others who are more capable than myself to furnish one.

I much regret that we have not a report from the able pen of Mr. J. Traill Taylor, as I know it would have interested us and been appreciated.

As regards the Progress of Photography during the past year, it will appear that there has not been any very marked improvement to record. But let us reflect and see what has been done, for most assuredly there has been a great progress in the spread of the knowledge of our art-science. Never has there been a year so prolific in the creation of photographers in America as during the past year. If we go on increasing as in the past, it will not be long before the number of amateurs will outnumber the professionals. In my opinion this influx of educated men of an enquiring turn of mind will be anything but hurtful to our profession, it will assuredly tend to elevate it in the estimation of the public; a thing we stand in need of.

One rapid stride that photography has recently taken, is the use that is made of it in courts of law as a means of aiding juries to form just and exact opinions on matters that otherwise would be in doubt.

In cases of forgery, duplications of precious documents, comparisons of specimens, of textile fabrics, blood, and crystals, it is constantly used with ever-increasing advantage, and the veracity of the testimony of the expert is put beyond the question of a doubt. The detective camera has also been brought into practical use, and adds its assistance to the detection of the criminal. In jails and penitentiaries likewise, the camera and photographer have penetrated and an instantaneous likeness of each new inmate puts the prison authorites in possession of a description of a prisoner far more accurate than any verbal explanation. Many experts have been brought from the ranks of the amateur photographer because the professional photographer has not the time or means to make a study and specialty that an amateur is capable of doing.

In Europe one of the most marked im-

provements or discoveries has been made by Dr. Herman Vogel, of Berlin, he having discovered a process by which colors can be photographed in a manner that will render their just values more correctly than hitherto has been the case. The learned Doctor has given his process to the world, which has been appreciated by his countrymen who have voted a handsome testimonial prize for his services in this and other improvements in our art. However, from recent European advices it seems likely that Dr. Vogel's claims to this discovery are to be disputed, as Mons. Attaut Tailfer, a Frenchman, claims that he is the inventor and patentee of the isochromatic gelatino-bromide of silver plates, and in a long discussion that occurred on the 4th of July before the Photographic Society of France, it was proved that Major Waterhouse, of Calcutta, had a prior claim, being the first to propose coloring the film to obtain different results.

In many branches of what would be called commercial photography, great progress has been made during the past year.

I have reference to the mechanical means of rapidly multiplying photographs by means of processes known as typographical or lithographic; a process known as the ink process gives very beautiful results, being extensively used in England, and we frequently receive illustration in their journals that prove the perfection they have arrived at in this mode of producing a plate that can be employed in the steam press as the Sprague ink photograph which has been used for book illustrations.

We have every reason to believe that the time is not far distant when our daily papers will be illustrated by the aid of photography, for there have been many and great improvements in block work by Ives, Meisenbace, and several others well known to us

The bromo-gelatine dry plate, as we see from the exhibition before us in these halls, has made immense strides in popularity during the past year. It is needless for me to try to say much on this subject when we have such examples before us that are facts indisputably proving the superiority of the dry plate over collodion and the negative bath, which are being very rapidly put aside by all progressive photographers to-day.

An operator now who cannot work dry plates satisfactorily, stands a poor show of obtaining a first-class situation.

The dry plate has caused a revolution in our business in many ways; the smallest country photographers can now claim to use exactly the same chemicals as the best operator in our profession; but I would remind them of a recent remark made by Colonel Stuart Wortley, at the last meeting of the Photographic Society of Great Britain, that "he could teach a person how to make a plate, but that to develop a plate was a science," a most true remark as regards the developing. The making of a really first-class plate is no easy matter, as any thoroughly conversant with their manufacture will admit.

I regret to say that during the past year we have lost several leading lights in photographic literature. I allude chiefly to the recent loss to photographic journalism of Mr. H. Baden Pritchard, who has done much for us, and I am sure his death will be a great loss. There have been several other losses of men prominent in the profession in England and other countries in Europe, but it gives me great pleasure to state that I have not to record the death of many in America.

As regards the progress of our literature, it seems to be rapidly increasing; for instance, in Chicago we have a weekly and also a fortnightly published in the interest of our art.

In Europe the governments take an interest in photography that is not done in this country: the King of the Belgians has invited a congress of photographers to assemble at Brussels to take into consideration the advisability of greater accuracy in the use of terms and uniformity with regard to photographic dimensions.

In England the Photographic Society of Great Britain has accomplished something on this subject by establishing standards for screws and flanges.

It seems to me it would not be inappropriate for this Association to take steps to be represented at this congress to be held in Belgium. Whether or not the government of the United States has been invited to take any notice of the coming congress, I

am unable at present to furnish any information. I know that other governments have. We are certainly interested as much as our European brethren in the proper accuracy in the use of all terms connected with our profession.

Dry-plate photography, together with the rapid increase in the number of amateur photographers, has caused the manufacturers of all kinds of apparatus to bestir themselves to endeavor to produce the most portable, elegant, and useful apparatus. During the past year many improvements have been made which are of value to us all.

Every year the artists (the pairters I mean) are becoming more closely allied. The portrait painter finds it difficult to get along without the assistance of the photographer, and I find that the more a painter knows of photography, the more willing he is to leave his sitter in the hands of the photographer to light and pose his subject; he is more willing to look on and content himself with a few suggestions only, knowing that the good photographer understands the effects that can be obtained under his own skylight better than one who knows nothing about it.

I am satisfied that the demand for photography, in all its branches, is on the increase, and will be so.

Lastly, but not least, of the improvements that can be recorded during the past year, is the great progress in illuminating the dark-room for the dry-plate work. I most thoroughly endorse Mr. Debenham's system of orange and green glass as a means of satisfactorily lighting the dark-room.

Mr. Taylor's instalment was received by post from London, where he resides, and without reading was ordered printed with the proceedings.

Mr. Taylor's Report on Photographic Progress.

Photography advances with such imperceptible strides as to make it somewhat difficult to indicate definitely the progress it has made within a circumscribed period, more especially when such period embraces the comparatively brief span of one year. While the past twelve months have not been so fruitful in invention and discovery as to cause that period to stand out in contrast with others, neither have they, on the other hand, been characterized by stagnation.

During the past year, innumerable printing processes of a mechanical description, or involving the use of printer's ink, have been invented, patented, or published. Of these, some have reference to the production of intaglio surfaces for employment as in copperplate printing; others—and these the most numerous—come under the category of relief- or surface-blocks, for printing in conjunction with type.

There is another, to which none of these distinctions apply, inasmuch as it is neither an intaglio nor a relief process. It has not been patented or published, but is worked as a secret process. And yet it is in place to refer to it here, because during the past year it has been selected as the process apparently best adapted for preparing the illustrations of the leading European photographic journals. From the brief description which I shall give, its character, and, possibly, its modus operandi, will be perceived. To commence at the end: The printing is executed at the lithographic press from a transfer laid down on a lithographic stone, which is smooth or polished -not grained; and yet the print possesses a fine stippled grain, similar to a chalk drawing, or a print from a grained stone. From this, anyone conversant with the process of lithographic printing will necessarily infer that the granularity has beem imparted at a stage prior to that of placing the transfer on the stone. A film of bichromatized gelatine, supported upon paper, glass, metal, or any other substance more convenient, is exposed to light under a negative. It is now submitted to the action of chemicals, by which granularity is imparted to the surface, although the gelatine film may be so prepared as to possess within itself the requisites for imparting the stipple. In an outline sketch, like the present, however, it is unnecessary to describe the means employed for producing this indispensable effect—the more particularly as they are, doubtless, known to most of those for whom this subject possesses interest. The requisite granularity of surface having been obtained, it is rolled up with transfer ink,

and, an impression having been taken on transfer paper, is conveyed to the stone, from which impressions are obtained in the usual mode. From such experiments as I have made, I am enabled to say that the fineness or coarseness of the grain is under complete control, and ranges between the most delicate touch of a blacklead pencil to the coarse granular texture characteristic of the large portraits of actors and others utilized as public show-bills.

Desirous of ascertaining the possibility of applying this process to the production of surface-blocks, I laid a transfer upon a polished zinc plate, etched it in such manner as not to undercut the delicate stippled grain, and in this way produced a block which was capable of being printed when surrounded by type. This, however, is a deviation from what I commenced with, which is that the process as printed from lithographic stones is an accomplished fact, whatever may be the nature of its details, and is one which, from now being extensively made use of by European, and especially by English journals, is worthy of notice.

No topic has of late engrossed more attention than that of the illumination of the operating-room. The yellow light by which wet collodion operations could be safely conducted was found totally inadequate for gelatine-plate manipulations, and was superseded by light of an intense, deep, ruby color. In a physiological point of view, this was found to be productive of results positively deleterious to the eye-sight in some cases, and inconvenience in others. Hence, a reaction set in, and the question was propounded, "Which is the light that produces the least amount of action on the sensitive plate, combined with comfort to those in the dark-room?" Mr. W. E. Debenham, of London, a professional portrait painter, constituted himself the champion of reform. He found that perfect safety to the plates, together with comfort to the eyes, and a resulting light of a character which, by contrast with others, may be termed a very subdued white light, was obtained by interposing between the lamp and the manipulating-bench a compound layer composed of green glass and yellow

paper. Two thicknesses of paper of a deep canary color, along with a plate of green glass, or of gelatine or paper stained of a peculiar green color, have in my own case been made to supersede a deep ruby glass with much comfort and satisfaction. The particular tints are of importance.

But the special advantages of green light as a useful source of illumination in the dark-room, are not now pointed out for the first time. In January, 1870, an American gentleman, whose name is as much honored in Europe as in the United States (for science is of no nationality), strongly recommended the substitution of green glass, pure and simple, for the orange glass hitherto employed in dark-room illumination; and this recommendation of Mr. Matthew Carey Lea was enforced by arguments deduced from his own experience of its use. The light he employed was gas, and the green glass was neither the darkest nor the lightest kind, but that of an intermediate shade, care being taken that it was not of a bluish-green. Such a light, while possessing all that comfort and safety for the eyes claimed on its behalf at the time by Mr. Lea, was safe for collodion plates only, and this when the light was not too powerful. The addition of the yellow paper referred to appears to fulfil all the requirements of the present time. Even when it may prove inconvenient to at once remove the red glass from a window or lantern, a marked improvement in the quality of the light will be immediately perceived by the addition of one thickness of yellow paper.

The subject of increasing and reducing the intensity of gelatine negatives is one which has received and is still receiving much attention. As regards intensification, chloride of mercury, followed by other agents, still enjoys popular favor, notwithstanding many recorded cases of deterioration. The first action of chloride of mercury upon a negative, as we all know, is to turn it black. If the action be arrested at this stage by copious washing, the image appears to be permanent. Certainly I have found no change in some that were treated in this manner about nine years ago; while in connection with other negatives treated with this salt combined with iodides and

other preparations, I have not experienced the same immunity from change.

A method of adding iodide of mercury to the developer, as suggested by Mr. Henry J. Newton, by which an increase of intensity is obtained by the developing operation. is a fitting subject for, and doubtless will receive consideration by the members at this Convention. A solution which is at once a decolorizer and-with the addition of a few drops of silver-an intensifier, was introduced by Mr. B. J. Edwards just in time to permit of its being alluded to in my report on photographic progress last year. It consists in adding to the usual clearing solution of citric acid and alum a quantity of protosulphate of iron, in the proportion of about one-third more than the combined weight of the other two ingredients. Wheu employed without any nitrate of silver, it decolorizes a yellow negative; with silver, it intensifies the image. Since the last convention it has been much tried, and enjoys popular favor. Pyrogallic acid, as a reducer of the nitrate, is also now being employed. These, it will be observed, are analogues of the methods long since suggested for collodion intensification. I fail to discover among my negatives any which have faded after having been treated first with chloride of mercury, and then with diluted ammonia, or old cyanide fixing solution nearly saturated with silver. Exceptional care was taken in the washing of these.

Reducing intensity may be effected by a variety of processes. Those only which are of recent introduction will be here noticed. Mr. A. L. Henderson has found that the fumes of cyanide of potassium, acting upon a gelatine negative to which air has free access, will effect a gradual reduction of its intensity. This reducing action is not a rapid one. It may be safely predicted that a method of reducing intensity proposed by Mr. E. Howard Farmer will prove to be the process of the future. If a solution of ferricyanide of potassium (red prussiate) be applied to a gelatine negative, the silver forming the negative becomes immediately converted into ferrocyanide of silver, to remove which all that is necessary is to apply hyposulphite of soda. Mr.

Farmer mixes these together in the following proportions: An ounce of the ferricyanide is dissolved in a pint of water, and when about to use it, a few drops are added to a solution of hyposulphite of soda of the same strength as the other. When the negative is immersed in this, a gradual reduction of intensity takes place; for as the silver forming the image becomes converted into the ferrocyanide of silver, it is immediately dissolved by the hypo. I have tried numerous experiments with this system of reducing negatives, both wholly and locally, and beg leave to bear testimony to its merits. Its description will suggest the somewhat analogous solution of iodine in cyanide of potassium; but the latter is unmanageable and dangerous by comparison.

Much ingenuity has been displayed in

the devising of instantaneous shutters, into which have been imported numerous mechanical appliances. Portrait photographers require, however, not so much a shutter giving instantaneity of action as a prolongation of the exposure at will. Without intending any slight to the many ingenious inventions designed to effect this end, I may adduce, as an example of one of the latest, that recently introduced by Mr. Cadett, the gentleman who, it will be remembered, was the first to apply the pneumatic principle to exposures in the camera. This most ingenious effort of Mr. Cadett may be described as a square cap, which is fixed upon either the inner or outer end of the lens. A very fine piece of rubber tubing is attached to the side, the other end of which terminates in the well-known pneumatic ball. Upon pressing this, a tiny rubber bellows, concealed in the body of the cap, actuates a lever, by which a sliding shutter, working between guides, immediately darts upward, leaving the lens uncovered for either a fraction of a second or a period that may be prolonged into minutes, according to the nature and duration of the pressure upon the rubber ball.

Shutters suggest lenses. Since the convention of last year, no new form of lens has been introduced; but immediately before that meeting, an amateur optician, Mr. Thomas Furnell, devised a form of combination which, from its character, appears

to hold out a promise of good so soon as it is introduced by the manufacturing optician. Although it cannot be said to possess either novelty of principle or, indeed, anything startling-inasmuch as it is only a slight departure from what has been previously effected-yet curves other than those hitherto adopted have been imported into it, and, while there is no difficulty in its construction, it defines sharply over a moderately large field. It is a triple lens-a class, by the way, which has been out of favor for several years. Its front lens is achromatized. The central element is a single lens of flint glass, double concave, and its back a plano-convex of crown glass.

Nothing has of late transpired with negative gelatine emulsion calling for special mention, unless it be the fact that the value of an addition of iodide to the bromide is more and more fully recognized. The preparation of paper, opal plates, and plain glass plates, with gelatino-chloride emulsion, is now an established branch of commerce, at least, in certain parts of the world. For producing enlargements by the lantern, the application of emulsion to paper offers exceptional advantages, for the operation may be conducted quite independently of daylight. Opal pictures, either enlarged or printed in the frame, possess a peculiar charm; while, for lantern transparencies, a point of value is found in chloride emulsion, as with any given brand of plate any desired tone-from the warmest red to the coldest black, including sepia, brown, and purple - can be obtained at will by the action of the developer.

It is several years since eosine was suggested as a substance which, when added to collodion, tended to give a more truthful representation in light and shade of the colors of nature. It is pleasing to be able to state that Prof. Vogel has of late made further advances in this department of photography.

Among the deaths of those more or less known in the ranks of photographers may be noticed that of Mr. C. W. Codman, of Boston, and in the old world those of Mr. H. B. Pritchard, of the *Photographic News*, and the Rev. F. F. Statham, who was President of the South London Photographic

Society since the period of its organization.

There are many other subjects of a less important description which have transpired in the photographic world, but even to refer to them all would unduly lengthen this communication.

J. TRAILL TAYLOR.

A vote of thanks was given the Committee.

Mr. J. F. Ryder, the veteran and faithful Associationist, read a brief report, as Chairman of the Executive Committee, depicting a healthful, cheerful outlook for the Association, which he declared to be growing in numbers and influence, holding its position abreast the noble art-science which it advocates.

Mr. Joshua Smith reported on the Fitz-gibbon testimonial. The sum of \$560 had been collected from various sources and handed over to the widow of Mr. J. H. Fitzgibbon.

Messrs. Carbutt, Hesler, Carlisle, Motes, and McMichael, were appointed a committee to nominate officers for the ensuing year, with instructions to suggest a locality for the next convention.

Some amendments to the By-Laws were offered, and laid over until the next session.

The peace of the seance was much interfered with by the hammering of the earnest staff of exhibitors and their assistants, who were yet at work completing the arrangement of their exhibits.

It was therefore announced that no afternoon session would be held to-day, and thus an opportunity would be given the visiting photographers to become acquainted not only with each other, but with the attractions of the exhibition.

Moreover, as Secretary Weingartner announced an excursion had been arranged for the afternoon, the objective point being the Zoological Gardens, and the cost of tickets (for sale by him) thirty-five cents.

A grand fireworks exhibition had also been arranged for Wednesday evening, at the Highland House, to include the "Bombardment of Alexandria." Tickets for sale to-morrow, at thirty cents.

From the applause accorded these an-

nouncements, I judged that the diversions met with more favor than the legitimate work of the Convention.

The hammering was now intense, and immense. Sometimes continuous—deafening; sometimes spasmodic—like the touches of a horrible, demoniacal neuralgia.

Yet, amid all, the courageous President bravely fulfilled the injunctions of the constitution, and closed the first session with his "Annual Address."

It was made all the more impressive by the pounding which it received at the hands of the responsive exhibitors near by.

President Kent said:

Ladies and Gentlemen: It would be an assumption on the part of the presiding officer, and an act wholly unwarranted by the necessity of the case, to enter into any detailed statement of the condition of this Association, or to devise or advise any particular course of action on the part of the members.

The various interests or requirements are matters as well understood by most of you as by myself, and so I have omitted doing any more than comply with Section 8 of of the By-Laws, which prescribes that the first session shall close with the President's annual address.

The meeting last year, at Milwaukee, was the first one of the Association I had the pleasure of attending. That meeting, under the direction of my able and distinguished predecessor, Mr. Beebe, was regarded as the most successful and interesting in every particular of any previously held by the Society, and naturally, I have looked upon the management of it as somewhat of a pattern to be followed in our present business session.

Those of you who were so fortunate as to be present at Milwaukee will remember how expeditiously the business affairs of the Association were conducted, and how little of dissension and dissatisfaction was apparent in those taking part in the discussions and proceedings of that meeting. I may be permitted to hope that our present deliberations may be characterized by the same harmony and absence of strife and animosity that prevailed at that time.

You also remember how little of your

valuable time was consumed by your President at the meeting of '83. Even his annual address detained you but little more than five minutes, and yet covered all necessary grounds, except, possibly, a display of his ability to prepare an elaborate address, which all would concede him capable of doing.

It will be my endeavor at this time, with your cooperation and assistance, to have brevity and despatch as prominent features in our proceedings as was then apparent.

The constitution enjoins upon the presiding officer the duty of making an annual report of the progress of the Society during the year past. In compliance with that requirement, I submit for your inspection and consideration the elaborate address (more eloquent than any I can utter) displayed upon the screens in the adjoining rooms and corridors, and in the manufacturers' and dealers' department, upon the other floors of this building.

While that display may not, in quantity, greatly excel all former exhibits of this Association, you will admit that in quality it has not been equalled by anything heretofore shown; and I am safe in saying we may indulge in justifiable pride in regarding this as the finest example of the possibilities of our beautiful art ever made at any time or any place; and I feel like congratulating you on the evidence there presented; not that we have achieved the end desired, or arrived at the point where the photographic stage puts up, but that we have gotten a start that in the end may accomplish results that shall entitle the photographers of America to be ranked as artists preëminent above all others.

The time has been when the profession of photographer was not held in as high esteem as that of statesman or expounder of the law; in fact, to be a photographer then was not regarded as any great credit to a man, and the occupation entitled him to the distinction of being set aside as of small consequence.

But, gentlemen, we are able to discern in the present status of the art, a condition of things quite different from what obtained at that time. Photography and photographers are to-day accorded the high rank to which it and they have been elevated by the energy and intelligence of such men as I see before me on this occasion, and whose works are now displayed in the adjoining corridors.

It is well for the profession that men experienced in the occult qualities of photographic and artistic conditions, men of energy, who are abreast of the times in every way, are to-day engaged, heart and soul, in lifting photographic science and photographic art to the importance to which they are entitled. For this condition of things, so apparent all about us, the P. A. of A. is entitled to a large degree of credit. While we, as a National Association, would not undervalue what has been done by State and local societies, we may feel a just pride in contemplating the amount of good the National Convention has been instrumental in accomplishing.

Let us hope that this Association in the future will be able to advance the interest and welfare of all connected with it to such an extent that every reputable photographer in this broad land will be proud to be enrolled as a member.

There is one matter of vital importance to every photographer to which I regret the necessity of alluding at this time; a matter that concerns the welfare of all more intimately than anything else connected with photography-I refer to the subject of prices. It is lamentable that there are those in our profession who, by necessity or greed, feel compelled to put a price on their own productions that will barely pay for material and labor employed. Unfortunately, too, the evil is not confined to those commonly denominated "Cheap Johns." If such were the case, and cheap prices always meant cheap pictures, photographers of ability could well afford to pay no attention to this troublesome matter. In some localities this is doubtless the case; but many of us have reason to know and regret that work of an excellent, if not superior quality is made at prices which these men are pleased to say "defies competition." This fact, that good work, made by men of considerable ability, is sold at such ruinous prices, is the source and sum of all the price troubles.

Cheap pictures, as such, are not, by any means, an unmitigated evil, if, indeed, they are not an actual benefit to the better class of photographers; and really, too, such productions are a necessity with the masses, who would be deprived of these luxuries if compelled to pay extravagant prices. The necessity is that there should be a correspondence between price and quality, and the effort of this or any society should be to promote that equality, rather than to stimulate strife and bitterness among those engaged in the business.

We cannot if we would ignore the fact that photographers, and even those who do not think exactly as we do, have rights that we are bound to recognize and respect. It should be remembered, too, that since they are possessed of such rights, we are, and will continue to be powerless to coerce them into our way of thinking and acting.

It is indeed a matter for serious consideration, and I fear no satisfactory solution of the difficulty will be reached in the near future-certainly I have no scheme or suggestion to offer other than what I have already intimated, that a conciliatory course, in opposition to such measures as I have latterly seen advocated by some of our photographic publications should be pursued. We may organize into societies and committees, and legislate low prices out of existence-on paper-but the evil will still be as prevalent as ever, while the perpetrators of such will smile at our futile efforts to regulate their business and establish their prices.

What action, if any, this Society should take, is for others, who may possibly have clearer ideas than your President, to suggest or advocate.

It is apparent to my mind that, while there is no subject of equal importance, there is none more difficult to compass. At any rate, no one likes to be driven. Men are more easily won by argument and appeal to their convictions of right and justice, or at least to what would appear to be their own interest, than they are forced into compliance with the views of others.

It is hardly necessary that anything should be said at this time relative to the subject of gelatine plates—not that the subject has lost any of its importance or interest to practical photographers, or that it is so familiar to all workers that nothing new can be said or suggested. On the contrary, it appears to me that there is no subject attracting more attention at the present time than that of dry plates.

While we have learned much of the advantages of this process, we are still far from having discovered all its possibilities. There are those who are still reluctant to concede its superiority over the wet process, many still contending that the crispness and vigor of the old method is not attainable with the new. It is noticeable, however, that most of those entertaining this view are the ones least familiar with the process. And it is doubtful if any who have adopted the dry plate and become familiar with it have given up its use and returned to the old bath and collodion.

Its advantages are so many that its abandonment would be such a long step backward that no progressive photographer would think of taking it. In spite of all opposition, it is evident that the gelatine process has come to stay, at least until something possessing superior advantages takes its place.

But, having promised that our proceedings shall be characterized by brevity and despatch, I shall not now proceed to violate that agreement by keeping you longer than to express the hope that every member of this body will be actuated by a desire to do all in his power to promote the welfare of the National Association, realizing that in doing so he is working for his own interests and the interests of his fellow-workers.

An adjournment was now moved.

The President announced that to-morrow ex-President J. F. Ryder would be the orator of the day, and deliver his address on the "Business Management of Photography."

Mr. Poole, of St. Catharines, Ontario, announced the coming convention and exhibition of the Canadian photographers, to be held in Toronto, Canada, in September, and invited all to participate.

"Stop that hammering," cried President Kent; and then the motion to adjourn was seconded and carried. E. L. W. CINCINNATI, July 30, 1884.

Those hammers, yesterday, were so emphatic that they caused the convention to stampede, and this morning we met in a hall in another portion of the great building. It was quieter, but the classical photographic surroundings, which made yesterday's quarters so entirely agreeable and apropos were absent.

President Kent called the Convention to order, and asked for the report of the Nominating Committee.

Mr. Carbutt, Chairman, being absent, no response was made to the call.

In answer to the statement from the Chair that miscellaneous business was in order, Mr. J. P. Blessing, of Baltimore, addressed the Convention upon the subject of "Prices"

Much interest was expressed in these soundings from Baltimore, where the insinuating Octopus, "Low Prices," has wound tightly some of its most cruel feelers.

Mr. Blessing said:

Last year I had the honor of addressing you a letter on the subject of prices, which was read and discussed at some length; but, unfortunately, my views and suggestions were misunderstood, and the discussion took the wrong direction. I was understood as wanting the Convention to fix the price to be charged for photographs, which was entirely foreign to my idea, and altogether impracticable. What I did want the Convention to do was to say what ought to be charged for good photographs. If first-class cabinet photographs are worth eight or ten dollars per dozen, let us say so. If second-class photographs are worth six dollars per dozen, let us tell the public so; and if another class of photographs can be made honorably and honestly for three or four dollars per dozen, let us call them third-class, and tell the people so.

But if good work cannot be made for one dollar per dozen, one dollar and a half per dozen, two dollars per dozen, or two and a half dollars per dozen, let this Convention say so in terms not to be misunderstood by the public, so that everybody will know what estimate to place upon the productions of the "Cheap Johns," who are so lavishly advertising the best work for one

dollar a dozen, and absolutely humbugging many intelligent people into their places of business. I have prepared a set of resolutions embodying my ideas concisely, and ask this Convention to adopt them or substitute something better:

Resolved, By the Photographers' Association of America, in Convention assembled, that first-class cabinet-size photographs cannot be made for a less price than eight dollars per dozen; second-class not less than five dollars, and third-class not less than three dollars per dozen;

Resolved, That the price charged by the proprietor of any gallery shall class his work;

Resolved, That the photographer who works for prices less than those quoted is compelled to use cheap material, employ cheap and unskilful assistants, and will give his patrons inferior and unreliable work.

Mr. President and Gentlemen, brotherlaborers in the field of art, do not leave Cincinnati until you have put yourselves squarely on the record in regard to prices. For the evil is growing, spreading, and widening, and will continue to eat as doth a cancer, until photography becomes a byword and a reproach.

We all know that silk can be had at fifty cents a yard, and silk at five dollars a yard, and it is no hard matter for the ladies to understand which is the best. Let us make the price of photographs as easy of comprehension. If my competitor next door makes photographs for half what I am charging, and my patrons ask why I cannot make them as cheap, I have to make the best defence I can. In doing so, if I make the case strong, they condemn me for it on the ground of being uncharitable and But let the Convention unneighborly. sanction a basis for prices, and then each one of us can make such local use of it to suppress the fast widening circle of cheap pictures as he thinks best.

If all of us were in your position, whose work stands extra No. 1, then there would be no necessity for urging this Convention to take action on this matter. But come with me to Baltimore, and see the pitiable condition of photography to-day, brought about by one man through spite. But I

will not harrow up your feelings by reciting the condition of our fair art there. Suffice it to say that prices range from one to two and a half dollars for cabinets in the majority of the galleries.

You all live in glass houses, and are as liable to suffer from the same cause as we in Baltimore. Therefore, I earnestly entreat you not to let this opportunity pass of putting your condemnation upon the ruinous practice of cutting prices.

Mr. Blessing's noble appeal was met by silence at this time, and his resolutions not seconded, for a reason that is inexplicable. One would be justified in thinking that everybody present was in the low-priced boat.

Certainly Mr. Blessing's propositions should receive the sanction asked, so that those who wished could show the documents to their patrons when making an effort to raise their prices.

The price question seems to be a ghost, of which all are afraid.

As I sat there, and from the platform witnessed the non-effect of Mr. Blessing's earnest address, I could not help but think of one or two famous scenes in *Hamlet*—one where something like the following dialogue occurred:

POLONIUS: Do you know me, my lord?

HAMLET: Excellent well. You are a
low-priced photographer; cutting down
your rates to a ruinous notch, injuring yourself and your neighbor, and your art degrading, too.

Polonius: Not I, my lord.

HAMLET: Then I would you were a more honest man.

Yes, if the truth were known, I believe one-half of those present had dirtied their fingers with cut prices, and had grown into fearing to have the subject broached. And yet, the writer hereof may misjudge the good photographers. "The spirit (of fear) that I have seen may be the Devil, and the Devil hath power to assume a pleasing shape; yea, and perhaps (as he is very potent with such spirits) abuses me to damn me."

Various motions now were made: one to elect a permanent Secretary; another, to

appoint a committee to revise the By-laws; a third, to preface resolutions of condolence over the death of Mr. H. Baden Pritchard.

Messrs. Klauber, Bankes, and Bellsmith were appointed to revise the By-Laws.

Mr. A. Gentile was appointed to draft resolutions on the death of Mr. Pritchard.

Mr. A. L. Henderson, of London, being present, was invited to the platform, introduced, and made a neat address.

Among other things, he said:

I can consider myself highly honored at this kind reception. It is certainly more than I expected when I left my native shores to come to your great country here. I must say that there are several things in connection with your country that I do not like. It is too large, for one. I do not like your mosquitoes either. My wife doesn't like them either; she is confined to bed this morning from the effects of mosquito bites. I am sorry to say that I am not a photographer at all; my forte is more in the chemistry of photography, and I have done the best I could to forward photography by that means. You are, no doubt, all familiar with the articles that have appeared from my pen in the English journals, and have been often copied in the American journals. I am here as the representative of an English Society—the London and Provincial Photographic Association. I came over to make a short visit, and while I have been here I have been very courteously treated by your citizens. I am no speaker; I am a photographic chemist, as I mentioned before to you. I thank you very much for allowing me to visit your Society, and I shall go home with a very pleasant recollection of the great progress that I have seen.

Mr. J. F. Ryder, the orator of the day, was now called forward, and made the following address:

On the Business Management of Photography.

Mr. President, Ladies, and Gentlemen: As a rule, men think well of themselves, and don't care to be told what they already know. There is probably not a man here who doubts his ability to run the photograph business. You will please understand, therefore, that I feel embarrassment in so delicate a matter as undertaking to

tell you you don't understand your business, and if you will only listen, I shall tell you all about it. I do not take such liberty, but if you will tolerate me a few minutes I will give you my convictions upon the subject.

The first necessary requirement—the foundation stone—is a thorough knowledge of every department of the work. An intelligent understanding of one's business is solid capital. The more of that element a man carries, the greater is his strength. As we have no established system of apprenticeship, no regular course of study or practice for the requirements of our young art, the learner is dependent upon a haphazard chance. His aptness at catching an idea, with a natural handiness in taking to new work, a taste for art, even in a small way, prove his good friends in grasping photography.

Considering the many intricate points in chemical requirements, the judgment necessary to be exercised at every stage of the work, the many handlings and processes which depend one upon another, and all necessary to the proper production of a finished photograph, it is really a matter of surprise how successfully it is accomplished with the small chance the workman has had for acquiring knowledge. I say this, believing that the instances where photographers are really educated in the art-science of the profession they claim to be masters of, are very few. I hope the time is near when regular schools of photography will be established and sustained in this country, where the learner may have the benefit of good teaching under competent professors, where study shall be necessary, that he should be compelled to pass a rigid examination in chemistry, optics, physics, light, lighting, composition, and drawing, before he would be entitled to a diploma, which should be a voucher for his competency.

Then we could expect intelligent skill in our employés, and the public could feel assured that they were being served in a proper manner.

Truly, knowledge is power. It is recognized and respected by the learned and ignorant alike.

The colored servant of a surgeon, explaining why his master charged twenty-five dollars for the performance of an operation in surgery which took but ten minutes to do, said he charged five dollars for the work, and twenty dollars for the "know how."

In all departments of the arts, the sciences, or in mechanics, a man of recognized attainments commands the confidence of his patrons, and the right to be well paid for his services.

To fit ourselves in the best way for the pursuit of our art, which is becoming yearly more

an art and more closely allied to science, buy books, subscribe for journals, magazines, and papers on the subject; make your collection of photographic literature a special library, then make its acquaintance—the more intimate the better. In this way you become master of the requirements of your business, which is a rock-bottom foundation upon which you may build with all confidence and security.

Educate your help, teach them in the little points and in the greater ones, train them to your ways, give them your ideas and listen fairly to theirs—you may sometimes get the best of the bargain in such exchange.

Make a collection of studies, and encourage yourself and your operator to frequent examination of them.

I have large specimen books, the leaves of which are of tarboard, twenty-two by twenty-eight inches. To these tarboards, on both sides, I glue mounted photographs—the best examples of work I can find. I purchase and I exchange. I have the work of friends and of strangers. It is a valuable collection for reference. They are kept where my operator has constant access to them. From them he can find almost every style of lighting and posing as well as the peculiarities of many noted operators.

A man who takes interest and pride in his work likes to know how he stands as compared with others; it is a spur to him, and keeps him on the alert.

Next in value to superior quality in your productions is a safe and careful system in all the various departments, from writing an order for a sitting to delivering the finished picture into the hands of your customer. Such system should be observed. The soul of that system should be order and cleanliness.

There may be to some an affectionate interest in collections of antiquated relics of good, old days, whose dust-coated and deep-stained fronts attest to long years of service, and certify to the claim of "old stager." Many a well-meant operating-room harbors in its corners and along its side walls, collections of crippled head-rests, rickety camera-stands, faded chairs with long-fringed upholstery, broken balustrades, old camera-boxes, etc., which are in no sense ornamental or advantageous.

It is a mistake to make a museum or a junkshop of the operating-room. Remove the old trash, give the scrub-brush, the paint-pot, and the whitewash tub a chance. If there be a worse smell than the atmosphere of a justice's office, it is the musty odor sometimes encountered in a slovenly kept photograph gallery.

The man who satisfies his conscience that he cannot afford to expend money in thoroughly renovating as often as once a year, and refurnishing when needful, is a poor manager, and works against his own interest. Nothing commands more prompt respect than tidiness. A seeming of prosperity soon brings the reality: people like to patronize a prosperous man, and naturally avoid a poor or unfortunate one; all of which shows that an air of thrift and systematic order should be practised and enforced. Keep your show of specimen pictures fresh by frequent changes. Your customers will visit you oftener if you have new attractions. They will take pride in you, and make your establishment one of the places to be visited by strangers and their visiting friends, among whom you will often find good customers.

How to treat with customers. Here comes the place for exercise of judgment-for real generalship. To be polite, attentive, genial, and at the same time firm in adhering to safe rules for your own protection, is a difficult thing to do, yet it can be done. A correct start often saves misunderstandings, which are to be avoided by all means. It is a great mistake to have serious differences with your patrons; you must remember that great consideration is due your sitter. Perhaps you sometimes sit yourself, and find you are whimsical and exacting. You like to try again for some reason you can't quite explain. Perhaps when you go to your tailor you are not at once suited with the fit or hang of your coat; his telling you it is all right does not quite convince. Remember these things, and be patient. You can make another sitting as quickly as you can make an argument. The sitting would perhaps convince and satisfy; your argument would not. Make your prices sufficiently high to justify the use of a number of plates and a half hour's time if necessary. You can afford to do this occasionally. If the exactions of your sitter be too great, you are entitled to charge for extra service; state it pleasantly but firmly. Sugar-coat your words where the subject is disagreeable.

In bargaining or arranging the details for a sitting have everything clearly and distinctly understood. If additional styles beyond what is described in your order are asked for, then is the time to mention the additional price, and to stand by it.

It is the good-natured fellows who can't say no, and who in their anxiety to please the dear ladies, get most imposed on. It is not an uncommon thing for a lady to have a dozen dresses and as many toilettes photographed before an order is given to finish. She gratifies her curiosity as to how they will take, and the more sittings she has the more undecided she is which to order. Is the lady to blame? By no means. The man has helped her to impose upon him, and is helping to establish the custom of having his neighbors imposed upon also.

I believe it entirely fair to make for all sitters two good negatives differing in position, that they may have a choice. If they desire more plates used, it is very proper they be required to pay extra for them. Particularly should sitters be made to understand that a change of dress or toilette means an extra charge for new sittings.

Don't be obsequious to your aristocratic customers and domineering with those of modest means, who are generally sensitive. Be polite to all. Remember where you get one dollar from the capitalist you get ten from the middle class, the working people. Be prompt as possible in finishing and delivering your work; make no promises on that point except you are sure of keeping them. Impress your customers with the fact that your word is to be relied upon.

Never put off the securing of an order for another time; clinch it on the spot. It is never too late in the day to make a sitting-that is, to take a man's order for a sitting. Many a time have I written orders for sittings by gaslight, and given my client into the hands of the operator. With his money in the till he is sure to come for his proof in the morning, and well satisfied to try again on learning that last night's effort was not entirely a success. Had I told him it was too late in the day, and advised his coming again, I should probably not have seen him more. With a desire for sitting while his mind was upon the subject, he would possibly try my next neighbor, who, with more enterprise than I had shown, would gobble him up.

The time to take money is before the sitter goes into the operating-room. Particularly should this apply to strangers and parties regarded doubtful. All photographers who fail in this important rule are practising an injustice upon themselves. Prices for photographs have become greatly demoralized. Many of our prominent and good men have been led or driven, I might say, "clubbed" into this great wrong. I will venture to assert that four in every five who have fallen into low prices, are ashamed of it, and would be glad to get back to more respectable figures and a more respecta-

ble standing among their fellows. Low prices are in every way degrading. The work is carelessly made, the standard of excellence is lowered—in fact is lost, ambition sinks to indifference, and enthusiasm is killed. The work becomes drudgery, devoid of interest or pleasure.

It is an injury and an insult upon our young art. It is a shame to the men who have helped bring it about.

Is there a remedy? Let us see. In all places where photography is practised are men and women who want the best that can be made, and will pay good prices for what they believe to be superior work. It is possible for photographers to invest their business with a tone and dignity that will be recognized by the people. There are many prominent instances to prove my assertion. This good city of Cincinnati stands at the front as an example to all other cities and photographers of this country. The gentlemen who practise photography here are not devising schemes for decorating the fences with the skins of their neighbors. They are so wise as to be upon the best terms with each other both in a business and a social sense; they are quite willing each other should live and thrive. They are prosperous; they are honored.

What is possible to Cincinnati is possible to all other cities. I think it a fitting time and place to bring this fact to your attention.

The curse of our business is this curse of low prices. There is no good reason for it. There is no wisdom or advantage in it. It is a wrong to yourself, your neighbor, and to the art you should be proud of, and which you should feel bound to protect.

Year by year this blotch is growing blacker and deeper. In many instances photographs are sold at prices which show that it is not possible for the proprietor to pay his help or his stock-bills and make a profit on his work. This means folly, ruin, and death to photography as a means of securing a livelihood.

Reform must come. I heard when a child that the city of Rotterdam, in Holland, was the cleanest city in the world, and the way it came about was by everyone scrubbing their own doorstep. I have always remembered it. My friends, the way to bring about reform in the abuse we are talking of, is not to wait for your neighbor, but to commence scrubbing your own door-stone.

If you are a skilled and competent photographer, straighten up and assert yourself. Put your establishment in proper train for an advance to a higher grade of work and a higher scale of prices. The public, recognizing your progress, will follow you. If your neighbor will follow also, so much the better for you both. If he will not, you have, by your act, proved yourself his superior, and will hold the advance ground you have taken. Elevate your art, and it will elevate you. Make your prices high, and make your work worth all you charge for it.

This, gentlemen, is the road to success. Look about you and prove its truthfulness. The men who have been fortunate in our business have been faithful to the course I have here laid down.

Loud applause followed Mr. Ryder's splendid address, and a motion was made by Mr. J. Inglis to have it printed in pamphlet form and distributed over the country at the expense of the Association. Although remonstrated against modestly, by Mr. Ryder, the motion was carried.

Mr. Ryder's address thoroughly awakened the Convention again on the subject of prices, and a few extracts from the stenographic report made will be of service to the readers of the Philadelphia Photographer, and show how the atmosphere is stirring in this important direction. The craft is evidently awakened, and I am glad of it. Now for what was said:

Mr. Bellsmith: Mr. Ryder has struck the key-note, I think, on the subject of greatest importance before this Convention. There are thousands of photographers in this country whose eyes are turned towards Cincinnati, and who are depending upon this Convention for an action that will amount to something. I urge upon the Convention to treat the subject as one the importance of which everyone must recognize that it bears towards our business; and as the time seems to be open at the present, I move that the subject be taken up for discussion; that all the arguments that may be brought to bear may be concentrated at one time, and that as much influence upon that subject may be used as possible. I, therefore, move that the subject of prices be taken up now; that all arguments that may be made may be concentrated in this session. Agreed to.

Mr. Cross: The subject before the house is one of the utmost importance to all; it is one that we are all interested in. I think

this Convention should show its position on this question at this meeting. A man should raise his price to such a figure as will enable him to turn out good work and make a fair profit. I move that this Society puts itself on record as favoring an advance in prices all along the line. It is a move in the right direction. One man cannot do it alone; but if the Society has made a move, he has a start. Let us make the start and move to advance the prices. I move that there be introduced a resolution that we all raise our prices.

Mr. Hessler: We know that there are lots of men in the profession who believe that their work is not worth more than they charge for it; they have no good opinion of themselves or of their work. If they put their prices at two dollars, the public will pay for it; if at a lower figure and a chromo given in the bargain, they think that that is all their work is worth and the best they can do. Now all the resolutions we can offer here will do very little towards lifting the thoughts of such men or their prices; the point is for every man to constitute himself a committee, and appeal to the world through his prices, through the quality of his work, and through his own estimation that his work is worth all he charges, and not give them a premium to buy his work, but charge a price that will pay for the work and leave him a fair and reasonable profit.

Mr. Cross: What Mr. Hessler has stated is true. We want to raise the prices; we want to show that this is the feeling of this meeting; it will help; it is a little start that points in the right direction. I move that the sense of this meeting be that everyone raise the prices to the best possible tigure.

Mr. Brooks: I want to state to this Convention that I feel that this honorable body of American photographers should not condescend to allow a man upon the floor of this Convention who would make cabinet photographs at the pitiful sum of a dollar and a half a dozen.

Mr. Blessing: From the discussion that has ensued, I have not seen anything that covers the ground as well as my resolutions. Let this Convention put itself squarely upon

the question of prices, and say that thirdclass photographs cannot be made for less than three dollars a dozen, without giving our patrons unreliable work. It is a square proposition and one that cannot be misunderstood. Let us take no doubtful action upon the question of prices, and if we say that three dollars is a fair price for thirdclass work and cannot be made for less, it covers the ground. We all know that silk can be bought for fifty cents a yard and for five dollars a yard, but we also know the difference. Let us make our prices as easy of comprehension.

No final action was taken upon the subject further than carrying the amendment of Mr. Inglis to Mr. Cross's motion, which was to print Mr. Ryder's address. Upon the call being made for the original motion, the President said: "The amendment prevails and is in the line of the original motion. I do not deem it necessary to put the original motion in this case. It is not required."

Rather a queer ruling, but no one appealed. The feeling of the Association, however, is unmistakably in favor of raising prices.

I had said my say through these pages and reluctantly kept quiet. I had a batch of things to offer, however, of which Mr. Flynn, the able stenographer, gives the following report:

Mr. Wilson, of Philadelphia: Mr. President, I have enough material here to take the rest of the morning; but I will only take about four minutes. First, I have here a stenographic copy of the minutes of the last meeting, a present from the publishers of the Photographic Times and the PHILADELPHIA PHOTOGRAPHER. Second. I have a motion to make that the Executive Committee take some means of notifying the public to witness this most magnificent exhibition of photographic work known in the history of photography, and that the matter be referred to the Executive Committee to devise and use all the means they can to get the public of Cincinnati here to see this exhibition to morrow and next day, so that some of the world may know what we can do. This will be one great step towards the elevation of prices. First lift yourself, then your prices and the world will help you.

The next thing I have is a letter of invitation. It is written to Professor C. F. Himes, one of our oldest amateurs, who to-day is conducting a school of photography at Cumberland, Maryland. The letter is from Charles R. Baldwin, President of the Mountain Lake Association. It is an invitation for the Association to hold its session of 1885 at Mountain Lake Park. Wilson then read the letter; also a letter from Prof. Himes.) I now move that this communication be referred to the Committee on Location; or if not, that when the report of the Committee on Location is received, this courteous offer be considered. I have here a description of Mountain Lake Park which accompanies the invitation to the Committee.

It was then moved and seconded that the invitation to Mountain Lake Park be referred to the Committee. Carried.

The President: The Committee will please take this matter into consideration in fixing a place of meeting in 1885.

Mr. Wilson: One thing more and I am done. It is on the subject of prices. Those of you who have read the best (as I believe) of all photographic magazines, cannot doubt the sincerity of the editor in the matter of raising of prices. To prove this further, I have published a little pamphlet (copies of which I have brought with me) on this subject. It hits the thing on the head, and is intended to be a help to those who want to be helped. I believe, if we could find the truth, we would learn that two-thirds of those who are here would confess that their prices are not what they desire. Our Brother Ryder has discussed the thing thoroughly, and this little pamphlet will follow it up.

Applause was followed by the distribution of the leaflet mentioned, entitled "A Quiet Chat on the Prices of Photographs." I will send a copy to all of my readers who did not get one, if applied to for it.

The Committee on Nominations now reported, and their report was referred back with instructions as to changes desired.

It was announced that a group would be made in front of the hall at 3 P.M., and "an

excursion to the 'Zoo' arranged for the afternoon, tickets for the round-trip, including admission, thirty cents."

In answer to a query it was announced that the sun was upon the platform and no demonstration could be made under the great skylight during the afternoon.

Mr. Seavey announced that he would demonstrate there during part of the afternoon.

Mr. Ryder said: In the matter of Mr. Seavey's demonstration to morrow, I will further announce that he has a special model, a very beautiful young lady who will be draped in the Greek costume, and it will be a great treat to all to see the effects that Mr. Seavey purposes to show and produce at the time mentioned, 2.30 P.M. I hope that he will have a fine audience which will be something rather attractive and interesting to everyone.

The President: Mr. Wilson, will you please state your resolution in regard to the matter of admitting the public to our exhibition.

Mr. Wilson: I did not make any.

The President: Will you make it as a resolution?

Mr. Wilson: I merely suggested that the Executive Committee do what they can to get the public here to morrow or next day, either by advertising in the public papers or letting them know in some way that there is such a show and let them come and see it. Yesterday I had a talk with General Goshorn, who was walking around alone, and he said he had offered himself to advertise at his own expense this magnificent and surprising exhibition. He says it is remarkable, and so it is. The people do not see what a beautiful exhibition we have here. Let the people come in and let us pound the fact into their heads that photography grows and we are going to grow with it, and our prices are going to grow.

A Member: The object of bringing pictures to this exhibition is for the public to see them and know what photography is and can do. If we charge them twenty-five cents, but a very few will come to see them. For that reason the public should be notified that they can come here free and see the

progress that has been made, and I would move that the President notify the public.

The President: The public will be notified through the journals of this afternoon and to morrow morning. We will see that that is attended to.

On motion, the Convention adjourned until July 31, at 10 o'clock A.M.

E. L. W.

Cincinnati, July 31, 1884.

The session this morning was devoted wholly to routine business, all of which could have been transacted by the Executive Committee without taking up the valuable time of so many people who had come so far with the hope of learning something about the practice of their art.

But there is a certain element in all such conventions—not peculiar to photography—the disciples of which might be termed constitutional cranks, who could not exist if a certain portion, all if possible, of the Convention's time is not taken up in tinkering the constitution.

The proprietors of "Ready Remedies,"
"Sure Cures," and "Reliant Eradicators"
live on such people, who are also ever tinkering at their physical constitutions.

Such personages are often very good people, but in a convention are a real trial and a bore. It is not the right thing to do to monopolize the time of a whole convention with matters which could safely be left to the Executive Committee, in order that there may be a wholesale slinging all around of the parliamentary information possessed by a very few.

As proof of this, I only have to point to the fact that thus far an assemblage of photographers from nearly every State in this great republic has held sessions, and not one moment has heen devoted to the discussion of photographic practice.

The element alluded to has become a disease, and should be eradicated.

This morning, at the opening of the session, Mr. J. H. Nugent, of Chillicothe, Ohio, read a tribute to the memory of the late Mr. F. A. Simonds, of the same city. It was pleasant to see a friend, and a competitor as well, thus remember and recognize

the virtues of the deceased, which was done in tender and fitting terms.

As a man and a photographer, our late member was characterized as one whose record was excellent.

A letter was read from Mr. J. Traill Taylor, accompanied by his personal report in behalf of the Committee on the Progress of Photography, which latter, being rather wordy, was received without reading, and a vote of thanks extended.

A gavel made from a portion of the famed Washington Elm of Boston Common was presented to the Association by Mr. T. H. Blair, and at once put to use by President Kent.

President Kent announced, in relation to the admission of the public to this building, that he had seen General Goshorn, the Superintendent of the Music Hall, this morning, and he kindly consented to remove the doorkeeper and allow the public access to the building, including the art museum.

For this a vote of thanks was tendered General Goshorn, in consideration of his great liberality in opening the building to the public.

Mr. A. Hesler, the Chicago veteran, now brought up an important matter. He said: I want to call the attention of this Association, and the members here assembled, to the postal law in reference to the carriage of photographs, in which photography is placed at the foot, in the estimation of the postal authorities. I have here a copy of the ruling of the Third Postmaster-General of the United States, which I beg leave to read, as follows:

"Fourth Class.—Mailable matter of the fourth class embraces labels, patterns, photographs, playing cards, address tags, paper sacks, wrapping paper, blotting pads, bill-heads, letter-heads, envelopes with printed addresses thereon, and all other matter of the same general character which is not designed to instruct, amuse, cultivate the mind or taste, or impart general information. This class includes, also, merchandize and samples of merchandize, ores, minerals, and seeds. Postage, one cent per ounce or fraction of an ounce.

" Third Class .- Mailable matter of the

third class embraces books, newspapers, periodicals, proof-sheets and corrected proof-sheets, and all matter of the same general character which is designed to instruct, amuse, and cultivate the mind or taste. Postage, one cent for two ounces, or a fraction thereof."

Mr. Hesler: This class (fourth class) also includes merchandize, samples of merchandize, ores, minerals, seeds, etc. You see, photographs are placed in the same category as paper bags, etc., and are of no use to people in general; or, at least, such is thought by post-office authorities. I think this classification of photographs is an insult to photography and every man engaged in it. I do not mean so much the postage as the insult placed on the art; and I think this Association should take action in the matter, and memorialize the postal authorities—to enlighten them that there is some amusement and elevation in photography.

Mr. Overbeck, of Hamilton, Ohio, followed Mr. Hesler, and said: I have a resolution to offer on this matter, as follows:

Resolved, That the recent ruling of the Postmaster-General of the United States of America, by which photographs were placed as fourth-class matter, be, and is hereby declared by the Photographers' Association as unjust, and against the business interests of the photographers, as well as the merchants and manufacturers of the Union;

Resolved, That this body respectfully ask the Honorable Postmaster-General to reconsider said ruling; and that the Secretary of the Association be instructed to forward a copy of these resolutions to the Honorable Postmaster-General of the United States.

After some discussion, the resolutions were carried, and the following committee was appointed to intercede accordingly: Messrs. A. Hesler, Edward L. Wilson, and the Secretary of this Association.

Mr. Wilson read the following telegram:

NEW ORLEANS, July 30, 1884.

E. L. Wilson, Cincinnati: Please extend invitation to National Photographic Association to hold next meeting and exhibition here, at our Exposition.

(Signed) E. A. BURKE,
Director-General World's Exposition.

Mr. Wilson: I cannot imagine that anyone here is ignorant of the fact that a World's Fair is to be held at New Orleans, commencing in December and ending in May. As to the telegram from the Director-General of that great exposition, which has just been read, of course if any action is taken on this matter favorably, our meeting would have to be between December and July next—as early as we choose. I have here a resolution that I would like to read in connection with this matter:

Resolved, That this Association accept, with thanks, the kind invitation of Director-General Burke of the World's Exposition, and that the committee named below be appointed, with power, for the purpose of securing a national representation of photography at the New Orleans Exposition: Edward L. Wilson, Philadelphia; J. F. Ryder, Cleveland; W. Irving Adams and V. M. Wilcox, New York; F. W. Guerin, St. Louis; James Landy, Cincinnati; James Mullen, Lexington, Ky.; S. T. Blessing, New Orleans; Charles F. Himes, Carlisle, Pa.; G. H. Ripley, Brooklyn, N. Y.; with power to add to their committee, if necessary to do the work.

The resolution was followed by some discussion, and adopted as above.

A desultory discussion now followed, caused by a little clash, which grew out of the reception of a motion at the last session to amend certain clauses in the constitution, and the after appointment of a committee to take charge of such matters.

Here the parliamentary snag lifted its head and swayed about, first mildly and then wildly, until everything was perturbed and muddy, and then the waters were calmed and the boat moved on by a series of complicated resolutions, which do not interest the general public, so I omit them.

The stenographic peporter was once aroused from his wrestle with tough photographic terms, and his diligent study of Wilson's Photographics (a sort of scientific pepsine, which assisted him in digesting the phrases named), and was brought to the witness-stand.

He acted like alum on the troubled developer, and retired conscious of having done one good deed in his lifetime.

The report of the Committee on the Alteration and Amendment of the Constitution and By-Laws was now read by sections, and again perturbed the Society emulsion so that it would not flow evenly at all. The temperature arose, and aroused the ire of sundry of the parliamentarians present, and a long and tedious and uselss discussion followed.

For the life of me, I cannot tell what precipitate was derived from the immense action, but, alas! the whole thing was laid over until the afternoon session.

While the excitement was at its height, some Toledo man announced the loss of his pocket-book, and an aspiring photographer shouted out his intention of taking a group of the members immediately after adjournment—a large one.

The President appointed Messrs. Edward L. Wilson, John Carbutt, and A. Gentile as the Committee on the Progress of Photography, for 1885.

The report of the Committee on the nomination of officers for the ensuing year was now received, and the election followed, with this result:

President .- James Landy.

Secretary.-Leo. Weingartner.

Treasurer .- C. M. Carlisle.

Executive Committee.—W. A. Armstrong and Joshua Smith.

This result, however, was not secured without the usual number of additional nominations, balloting, etc.

Tired, and worn, and heated, the Convention was adjourned to 2.30 P. M.

E. L. W.

CINCINNATI, July 31, 1884.

A hot afternoon, a heated discussion, and a broken-down and patched-up constitution and by-laws, are the result of this afternoon's emulsion.

A good long session, which should have been employed in discussing the work of the studio, was wasted in a constitutional clinique, which has left that immortal document in such condition that you wouldn't know it in your own familiar dark-room.

I am not going to bore my good readers by a detailed report of said seance. If I have unravelled the thing correctly, hereafter the initiation fee of new members is to be: for employers, \$3; employés, \$3; and \$2 per year for employers', and \$1 per year for employés' dues.

The following essential changes were made:

SECTION 1. The officers shall be a President, two Vice-Presidents, a Recording Secretary, and a Treasurer, who shall be elected annually, and shall hold office until their successors are elected and installed.

SEC. 2. The President shall preside at all meetings, and administer the rules of order usual in deliberative bodies; he shall nominate all special committees, unless otherwise directed; he shall countersign all orders on the treasurer; and shall also annually appoint a Local Secretary, subject to approval of the Executive Committee, for the place where the annual meeting is to be held.

We strike out all of Section 5, Article III., after the words "The Treasurer shall," in line 13 of said section, and add the following, so as to read, "The Treasurer shall be required to give an indemnity bond that shall be deemed sufficient and satisfactory to the members of the Executive Committee, and said bond shall remain in the custody of the President of the Society."

The Committee was comprised of Messrs. E. Klauber, T. W. Bankes, and H. S. Bellsmith.

The next discussion was on the subject of the appointment of a Vice-President for each State.

It was resolved, finally, to refer the matter to the Executive Committee, with power.

This was one of the wisest things done by the Convention.

The selection of a locality for next year now came up, and renewed the excitement. Some little of the discussion I append.

A member of the Committee said:

In the absence of Mr. Carbutt, our Chairman, I would simply say, briefly, on looking over the different locations, that the Committee think well of Buffalo, for many reasons. It is a cool, thriving little place; it is also easily accessible by rail from many directions; it is reached by all the leading trunk-lines of the country; it is also accessible by boat; and the location would be

very desirable, I am sure. It is within twenty miles of Niagara Falls, and many of our members have not, perhaps, visited that beautiful spot. Excursion trains can be run up there from Buffalo at a very small sum. Then, they have fine hotels, and an excellent hall. It is fairly central, and of late years it is well known that eastern people have not attended the conventions as they formerly did-they will not come far west. I do hope that if we get this Association to convene at Buffalo next year that we can get the New England and New York City people to be present, and I am sure our Western friends would be equally willing to go there; and I know our Southern friends would find it a cool and comfortable retreat from the heat. I hope it will be chosen as the place.

Mr. Poole, of St. Catharines, Ont.: I most emphatically endorse that nomination, from this standpoint: We have not a great number of photographers in Canada, but it is fairly well represented. If the Convention meets in Buffalo, it will very materially increase our attendance as Canadians, and it will add a very large number to the attendance, as it is only one hour's ride from that picturesque and beautiful city.

A Member: The only objection to Buffalo is that the place is so beautiful, cool, and comfortable that the members of the Association may all go down and leave the rooms of the meeting as empty as they are to-day. I think the members of this Association ought to consider the benefits of this Convention rather than going about the streets with their cameras under their arms taking views, and it would be much to their advantage. It is almost a disgrace that they leave this hall empty, and allow all such important things as ought to come before the Association to the number here this afternoon.

The President: It is intended to impose a penalty for non-attendance at the next meeting.

Buffalo was decided upon.

Mr. Gentile: I have here a report on the death of H. Baden Pritchard, which I desire to read. It is as follows:

The Committee appointed at yesterday's session to report on the death of the late H.

Baden Pritchard, the distinguished English author, beg to report as follows:

Resolved, In the course of human events it has pleased Almighty God to remove from this world of cares our much esteemed friend and co-worker, H. Baden Pritchard, by the loss of whom two hemispheres are called upon to mourn;

Resolved, That this Association do hereby take cognizance of this our severe loss by expressing our deepest sympathy with the fraternity at large; the same to be spread upon our records.

It was moved and seconded that this report be placed on file for publication.

Mr. Klauber: I move you, Mr. President, that this Association tender a vote of thanks to the citizens of Cincinnati, and to the press, and to all who have assisted in making this such a pleasant and successful meeting as it has been. (Carried.) Gentlemen: one word more. There has not been one single thing said as far as chemicals and business are concerned, which I must say I much regret. Before closing, I wish to recommend to your use the formula of Dr. Eder in regard to the yellow color and dry plate.

Thus Mr. Klauber barely saved the Convention from being dubbed inoperative and unpractical,

The President: The battle is fought, and I am glad to say that our party has the victory. We have had a grand and successful meeting; and as we are about to close this meeting I would like to express to you my appreciation of your kindness and consideration; and thanking you again for your courtesy to me, I would cheerfully resign the office of President to my friend, James Landy, of Cincinnati, and request of you for him the same kindness and consideration you have shown me. The exposition will be open until to-morrow night, while the business part of the Convention will be closed by this adjournment. If there is no further business, the motion to adjourn sine die is now in order.

Mr. Klauber: I forgot to include one little thing. I think this Association ought to pass a vote of thanks for the efficient services and the hard and the good work that our Secretary, Mr. Leo. Weingartner has

done in making this Convention the success it has been. I therefore move a vote of thanks and endorsement to our genial and efficient Secretary, Mr. Leo. Weingartner (Great applause), and to all the executive officers.

The motion to adjourn sine die and the vote of thanks were carried unanimously, and the Convention adjourned.

And thus ended the great Convention of 1884, for which so much preparation had been made.

Further on will be found notes, which, with these letters, is about all I could get out of the emulsion for the benefit of my stay-at-home readers. And so, adieu.

E. L. W.

THE EXHIBITION.

DIVIDED as my time was between duties at the meetings of the Convention and the calls of the grand exhibition, it was impossible for me to make a complete list of the exhibitors.

So, seeing how I was prevented from making a complete list of the exhibitors, I beg those whose names are omitted below to be lenient, knowing that I will quite willingly add all that are sent to me hereafter in my next issue.

There is no intentional slight; though I know the list is very imperfect.

I had no "headquarters" at the exhibition, though I believe my contemporaries all had, and scattered many sample copies.

My timidity was rewarded by many, who came to me and subscribed for "the very best of all."

The *Times* was circulated in all directions, and made a fine show with its elaborate cover.

The *Bulletin* box contained, I should judge, about four thousand copies, which were "free to the public."

The *Photographer* was offered by publisher, editor, and a fair damsel, at its head-quarters, in the main hall.

The Eye was opened in the middle of the stage, with its publisher and a young lady to keep it watchful over all.

The St. Louis Practical was attended by its amiable and popular editress and pub-

lisher, Mrs. Fitzgibbon, also on the stage. Her attendants were two casks of lemonade, which she generously dispensed to the public, free.

The "Air Brush" people had a continuous crowd about them, witnessing their "works of creation," on the rear of the stage.

Near by was Mr. W. W. Sherman, with his interesting and beautiful enlargements, made by his new process. He and the airbrush are sure to be great helpers to each other.

Mr. Sherman says:

These prints may be made with any pigment (color) or combination of pigments, but for general use are made with lamp-black for black and white work (crayon, India-ink, air-brush, etc.), and with neutral tint for colored work.

The prints made with lampblack will be found to match exactly the tone of the crayon, India-ink, or other black used for finishing. The best of neutral tint is used for colored work, making a most desirable color to work over.

There are no chemicals whatever used in the paper.

The pigments used are of known permanence.

The texture or grain of the paper is preserved as in no other process; no soaking or prolonged washing of the paper being required.

These prints have a "tooth" possessed by no other prints, for the above reason.

The whites are warranted not to lose their unequalled brilliancy, or the prints to fade in the least degree.

The prints are unsurpassed for crayon, stump, or point; they are especially adapted to the air-brush, and unequalled for watercolors.

They are the only cheap and reliable prints in the market.

The exhibition was dotted thickly in all directions with the red and shining color of apparatus.

The American Optical Company, under the leadership of Mr. W. Irving Adams, and through representatives, exhibited an immense assortment of apparatus. The great square in the centre of the main hall was surrounded by this, and presented a splendid appearance.

The Kilburn Gun-camera was among the novelties, and attracted great attention.

A throng was gathered in the great trade centre of the Scovill Manufacturing Company, continually, of stockdealers from the various cities, and purchasers from all parts. It was a scene.

Nearly opposite was the department of Messrs. P. Smith & Co., headed by the popular Mr. D. K. Cady, assisted by the veteran, Mr. Maginnis. But the "show" of this well-known, "old reliable" firm was not confined to their fine central exhibit of curtains, chairs, and apparatus, including Wilson's photographic publications. They had standing here and there as many as fifty-two backgrounds, painted by Seavey, Ashe, and Spurgin—the finest assortment ever placed on exhibition.

Messrs. Allen & Bro., of Detroit, Mich., made a fine exhibit of the already celebrated Suter lenses, and the work produced by them. We understand that orders were taken for "bushels" of them, and that the enterprising importers feel well recompensed for their efforts in securing such useful and low-priced lenses for the use of the fraternity. They will undoubtedly meet with a bon marche in this vast republic.

Mrs. E. N. Lockwood, Ripon, Wis., exhibited her Negative Washing-box, which is made of metal, and supplied with grooves, so as to accommodate thirty-six plates of various sizes, up to 11 x 14. An apartment for ice is supplied at one end. The Lockwood Clips were also much admired.

The Devoe Chair, and Backgroundbracket, with castors, were among the novelties which attracted much attention.

Messrs. Sheen & Simpkinson, of Cincinnati, were devoted to their department, which was well supplied with all the trade novelties.

The Blair Tourograph and Dry Plate Company, of Boston, made a magnificent display of their manufactures. The greatest object of attraction was the Combination Portrait Camera, which could quickly be transformed from an 8 x 10 into an 11 x 14 size. It was a splendid piece of workmanship. It was supplied with all the conveni-

ences for nice adjustment, and with a flexible, jointed slider. It was ordered "in duplicate," many times.

One of the finest exhibits, of course, was that of Messrs. E. & H. T. Anthony & Co., of New York—located at the end of the hall, at the stage. A portion of the wall of enclosure was made up of copies of the Bulletin. Their large glass cases, with Dallmeyer Lenses and the Detective Camera, added novelty and beauty to their department. Col. V. M. Wilcox was seen there, blandly explaining the merits of the various wares on show.

Mr. C. M. French, of Garretsville, Ohio, seemed to be doing a thriving trade in his Relief Borders, which grow more and more into use.

Messrs. Wolf & Cheney, of Philadelphia, exhibited the patent instantaneous shutter of Mr. Service, which is excellent and attracted a great many buyers.

Mr. John G. Hood, of Wilson, Hood & Co., of Philadelphia, and Mr. Buchanan, of Buchanan, Smedley & Bromley, of the same city, attended to their patrons in person, without any special exhibit.

Messrs. Willis & Clements were represented by Mr. Clements in person, and made a nice exhibit of platinum prints on paper, muslin, and satin.

Mr. W. G. Entrekin gave personal attention to a handsome display of his well-known burnishers, which added lustre to the whole grand, brilliant exposition.

One of the most attractive novelties was the Plastic Background of Mr. C. A. Schindler, of Hoboken, N. J. This is a real new departure, consisting of a series of plastic figures, curtains, and decorations, which are a great relief from the "scenery" background, and must meet a want long felt. The Schindler "Elite" Chair was also a favorite attraction.

One of the busiest men present was Mr. W. F. Ashe, of New York, the justly famed background painter. Mr. Ashe presented a fine exhibit of his interior and exterior backgrounds, which attracted many admirers and purchasers.

Scofield's Camera should not be forgotten in our mention of the splendid novelties in

the apparatus line. It is well named "Unique."

Mr. G. Gennert, of 54 E. Tenth Street, New York, who was everywhere, upon being asked, "Where is your exhibit?" would point proudly to the grand display of pictures, and say, "These are my exhibit, as nearly all are printed on 'Eagle' paper."

Mr. H. A. Hyatt, of St. Louis, Mo., made a fine exposition of general photographic merchandise, and of the backgrounds and accessories for which he is the headquarters.

Mr. J. C. Somerville, of St. Louis, Mo., also made a good showing, among which the Cramer Ice Box was considered a great attraction. It is made of iron, lined, and is the most practical dark-room accessory of its class.

Mr. L. W. Seavey, of New York, has educated the craft into expecting much from him, and he did not disappoint them this year; for beside his display of backgrounds, and photographs illustrating their use, he posed a lady model within the enclosure of his exhibit, and upon the platform, under the skylight, to delighted crowds, on several occasions.

The Dry Plate makers—Messrs. Cramer, Carbutt, Inglis, Eastman, Monroe, Norden, and others, were all supplied with darkrooms, and illustrated the manipulation of negatives practically. This was one of the most useful features of the whole grand affair, and was a help to many.

Dozens of interesting things have not been mentioned, simply because the days were not sufficiently long to allow one to examine them.

Messrs. Benj. French & Co., of Boston, exhibited a full line of Voigtlânder Portrait Lenses, Euryscopes, and Darlot Portrait and View Lenses. The power of the Euryscope was practically illustrated by a group of twenty-five persons (the Engineer Corps of the Austrian Army), made on a 30 x 42 inch dry plate by Victor Angerer, Photographer to the Austrian Court. Although by far the largest group ever seen in this country, it possesses all the merits of an artistic and skilfully-executed picture, its most noticeable features being uniform sharpness and illumination, extending to the very edges of the immense plate. A

full-length figure of a Viennese beauty, made on the same sized plate by the same artist, spoke volumes of praise about the unequalled capacity of the Euryscope—No. 8 being the size used in both instances. In connection with this exhibit, the firm showed Garland's Invisible Shutter, for portrait lenses, for which they are agents. As direct importers of the well-known Trapp & Münch Albumen Paper, they also invited the attention of the interested visitors to the splendid qualities of this favorite article. The exhibit was in charge of Mr. Wilfred A. and Mr. James French.

Mr. W. A. Lindop, of St. Thomas, Ont., exhibited his apparatus for the economical storing of backgrounds, which has been greatly improved this year. Photographers are impatient for its introduction into the market.

The Picture Exhibit.

Here the array was so overwhelming, and surprising, and extensive, and the time for examination so short, that it was impossible to make a full list of the exhibitors, to say nothing of their elegant work.

We are safe in saying that no such exhibit ever took place before. It was a grand affair.

One of its most attractive features was the display of emulsion plate work collected by the dry plate manufacturers.

Most prominent was the collection of Mr. G. Cramer, from the studios of Messrs. Scholten, Guerin, and Gilbert & Bacon, to which was added the splendid collection from Mr. Cramer's own studio, under the care of Mr. Hans Kreuger.

The two methods of development:

- a. With pyro.
- b. With pyro and sal soda,

were also illustrated by these negatives. There can be no question as to the last being the best. "You must be careful not to make them too strong," said Mr. Cramer.

Now, without more than one general testifying to the excellence of the work as a whole, only the names of some of the pictares which appeared to us most worthy of praise will be given; for were we to attempt to mention all the limits of our cover would not contain it.

By Mr. F. W. Guerin, of St. Louis, "I'se Rich," and other groups of negro boys, "Waiting for a Bite," and "The Bite," were very natural, and his whole grand exhibit twice halted and captured the Committee on Awards.

Mr. John A. Scholten, of St. Louis, was expected to make a superior exhibit, and he did, of magnificently managed portraits of various sizes, and on Cramer's plates.

Mr. G. Gennert, of New York, displayed a number of German pictures on his Eagle paper, among which some groups of children and a portrait of the King of Saxony were the gems.

Messrs. Gilbert & Bacon, of Philadelphia were distinguished by their fine collection of pictures of children and of brides.

Mr. G. Cramer, of St. Louis, perhaps, made the most extensive collection of any. "The Easter Rabbit," "Our Teacher," "The Broken Pitcher," "Success," "Punch and Judy," "Cinderella," and "The Sleeping Beauty," with pictures representing German legends, were all most attractive—all on a par with "Gretchen."

Mr. John Carbutt's dry plates were exhibited by many splendid pictures by various exhibitors, and were uniformly excellent.

Mr. F. Gutekunst, of Philadelphia, made a choice exhibit of portraiture of various sizes, and, probably, as a whole, represented the best printing in the whole exhibition.

Mr. A. K. P. Trask, of Philadelphia, also sent a fine variety of his excellent portraiture, which attracted many admirers.

Dr. H. N. Howe, of Philadelphia, exhibited a great variety of pictures representing the capabilities of our art and of the amateur photographer. His cattle pictures were unexcelled. The Peacock, the Bicycle Rider, a trio of crow's nests and landscapes—all instantaneous—were very fine.

Messrs. W. J. White, of Cleveland, Ohio, and S. R. Haight, of Washington, D. C., also amateurs, were well represented by their work.

Mr. W. H. Rau, of Philadelphia, also made a display of his fine landscape work of Pennsylvania scenery.

Mr. J. Monaghan's interior of the cathe-

dral of St. Agatha was, perhaps, the best shown.

Mr. John Carbutt, Jr., exhibited his first picture—a landscape, worthy of his "dry" paternal.

Mr. C. H. James, of Philadelphia, exhibited the only Indians, and they were good.

Mr. D. A. Clifford, of St. Johnsbury, Vt., made a creditable show of interiors and exteriors, which awakened interest.

Some splendid transparencies of the Government buildings at Washington, by Mr. F. Gutekunst, of Philadelphia, were by far the best shown, and were on Mr. Carbutt's "A" plates.

Mr. Geo. B. Wood, of Philadelphia, made an artistic display of platinum prints.

Mr. C. H. Tonndorff, of St. Louis, distinguished himself by his fine collection of "Stamp" portraits.

Mr. W. H. Potter's best Indianapolis picture was "The Doll at the Piano"

Mr. G. H. Croughton, of Philadelphia, made the only display of colored work and miniatures.

Mr. D. R. Clark, of Indianapolis, was made famous by his large plate portraits.

Mr. J. Landy, of Cincinnati, Ohio, excelled in his large heads of Murdoch, Jefferson, and Rhea.

Bushby & Macurdy, of Boston, displayed some fine cabinets.

Mr. Frank Thomas, of Columbia, Mo., had some nice examples of sculpture-photography.

If Mr. Max Platz, of Chicago, had shown nothing but his "Oriental Maiden" he would have won great fame. But he did show many other excellent pictures.

Mr. E. L. Russell, of Blossburg, Pa., made a fine showing of his work.

Mr. H. Rocher, of Chicago, gave us some examples of his work, made to sparkle as a whole by his "best portrait of Langtry." A young maiden in easy pose was the gem of the exhibition.

Mr. A. N. Hardy's picture of Blaine was the best thing from Boston.

Mr. Walker, of Philadelphia, gave "A Woman with Flowers," which was fine.

Mrs. E. N. Lockwood's Egyptian photos were most carefully done.

Mr. W. A. Armstrong, of Milwaukee, excelled all others in his poetry-inspiring collection of 8 x 10 landscapes.

Mr. C. W. Motes, of Atlanta, Ga., exhibited a large picture of "The Daughter of Danaus," and a similar one of "Little Bo-Peep"—both splendid.

The M. A. Seed Dry Plate Company were done credit to their plates by several exhibitors, among whom were Messrs. Gasall and Fischer, whose fine work attracted much praise.

Mr. W. A. French, of Boston, made a curious display of the "Famous Homesteads" of the Hub—a good idea.

Mr. A. S. Atchley, Rockford, Ill., had a creditable exhibit.

Mr. J. H. Kent, of Rochester, N. Y., with a Dallmeyer rectilinear lens and Eastman plates came up to the expectations of his admirers. His sheep and human lambs were fine, as were his pictures of old people.

Mr. Dixon, of Toronto, made a good showing of enameled pictures, now much out of date.

Mr. Sherman Gregg, of Rochester, N. Y., exhibited some fine large heads on Hovey's paper.

The Eastman Dry Plate Company exhibited thirty-two negatives of one person, of uniform excellence.

Messrs. C. Heimberger & Son, of New Albany, Ind., were honored by their display of general work, but especially by their examples of landscape, which did them great credit.

Messrs. Allen Bros., of Detroit, Mich., exhibited some attractive examples of portraiture, done by the new Suter make of lenses. These lenses are aplanatic. A pricelist is now supplied free. They come with many excellent foreign testimonials, and, as will be seen elsewhere, are daily winning American laurels, too.

Many of the choice exhibits were left for the Autumn Art Exposition, at Cincinnati.

Thus must end our list—very imperfect and unsatisfactory, but the best we could collect, before the impatient exhibitors began to remove their work.

THE DRY-PLATE AWARDS.

For some months back, our readers have seen the offers of our dry-plate makers, Messrs. Cramer and Inglis, of prizes for the best collections of work upon their plates. The following report shows the result of these offers.

The Committee on Awards made their report, as follows:

CINCINNATI, July 30, 1884.

MR. G. CRAMER:

Your Committee on Awards, having performed the duties assigned to them, beg leave to submit the following report:

For first prize on work 11 x 14, and larger, F. W. Guerin, St. Louis, Mo.

For first prize for best collection of cabinets and other sizes below 11 x 14, J. E. Hale, Seneca Falls, New York.

For first prize for best collection of views, J. Landy, Cincinnati, Ohio.

Your committee would recommend honorable mention of the following exhibits:

Scholten, St. Louis; Max Platz, Chicago; Gilbert & Bacon, Philadelphia, Pa.; O. P. Scott, Quincy, Ill.; Blessing & Kuhn, Baltimore, Md.; A. N. Hardy, Boston, Mass.; D. A. Clifford, St. Johnsbury, Vt.; P. M. Pausch, Newark, Ohio. Had Mr. Cramer permitted the collection made by his operator, Mr. Krueger, to be entered for competition, it would certainly have secured the prize, and should have special mention.

Respectfully submitted,

JOSHUA SMITH,
W. H. POTTER,
G. M. CARLISLE,
C. T. STUART,
S. J. DIXON,
Committee on Awards.

The St. Louis Dry Plate Company offered six prizes of one hundred dollars each for the best display of photographs made on their plates.

The awards were made to W. H. Potter, Indianapolis, Ind.; D. R. Clark, Indianapolis, Ind.; F. W. Guerin, St. Louis, Mo.; Strauss Bros., St. Louis, Mo.; C. W. Motes, Atlanta, Ga.; T. H. Doerr, Louisville, Ky.

Honorable mention for first-class work: D. P. Thomson, Kansas City, Mo.; P. P. Kirkness, Baltimore, Md.; Leo. Weingartner, Cincinnati, Ohio.; Tenfeld & Kuhn, St. Louis, Mo.; George Heyn, Omaha, Neb.; C. H. Tonndorff, St. Louis, Mo.

CINCINNATI, July 30, 1884.

MR. JAMES INGLIS:

The Committee on Awards beg leave to submit the following report:

For best collection of photographs, 14x17, Cook Ely, Oshkosh, Wis.

For second best collection of 14×17 photographs, G. M. Elton, Palmyra, N. Y.

For best collection of cabinets, G. M. Elton, Palmyra, N. Y.

For second best collection of cabinets, Brainard, Rome, N. Y.

C. T. STUART,
JOSHUA SMITH,
J. LANDY,
G. M. CARLISLE,
D. A. CLIFFORD,
Committee on Awards.

OUR PICTURE.

THERE has never been a great painter of historical subjects, or an imaginative painter, who has not been equally great in the province of portraiture. Michael Angelo, Raphael, Titian, Da Vinci, are not exceptions. Their pictures possess in a superlative degree everything that a portrait requires—dignity, the expression of character, and a keen perception of the beautiful in man and woman.

There is, indeed, no branch of the art requiring more careful treatment than that demanded in the delineation of the human countenance. To give to the face that mingling of softness and force which we see in the works of Reynolds, Gainsborough, and Rubens, demands not only a careful study of the principles of art, but also a mind capable of appreciating nature in her fairest works.

It has been well said that no painter can put more sense into a head than he possesses himself. Now, this is equally true of photography, in which the rendering of the head is the paramount object. The same sitter may be represented by two photographers. The production of the one may be all grace, ease, softness, and deli-

cacy of finish, with a mild blending of lights and shades—full of force and vigor; while that of the other falls flat, stale, and unprofitable; the former no more like the latter than "Hyperion to a Satyr." Nature is not to blame here. It is the lack of that art which seizes and moulds Nature to its liking.

In the days which are past, the public was satisfied with anything which bore some resemblance to the original, no matter how crudely rendered; but now, unless a picture possesses high artistic merits it is refused.

A feeling for art has been engendered amongst the people, and photographers in this country have ministered to that feeling—as the high artistic excellence of their work at the recent convention bears witness.

The ability to conceive beautiful postures, and to arrange the drapery so as to give it the appearance of a natural negligence, so to light the features as to bring out the character in the expression—such heads generally rivet our attention at once, and we return to them again and again, impressed with the thought that the taste and feeling of the photographer have very much to do with the proper and artistic rendering of the human face.

Since the object of this magazine has ever been to foster a taste for true art amongst the fraternity, it is with pleasure that we present our readers this month with a fine rendering of a female head, the production of Mr. Cook Ely, of Oshkosh, Wis., entitled, "A Daughter of the West."

Though named a daughter of the west, the subject is conceived in a true Grecian spirit, with gracefulness and simplicity, yet with force and vigor. The face is beautifully lighted, and there is a thoughtfulness in the eyes, which seem to be looking into futurity. The fillets which bind up the tresses of her hair add much to the general effect, and the simplicity of the garment harmonizes the whole subject. The words of Wordsworth are very appropriate:

"There she sits—
With emblematic purity, attired
In a white vest, white as her marble neck
Is, and the pillar of the throat would be

But for the shadow by the drooping chin Cast into that recess. The tender shade, The shade and light both there and everywhere,

And through the very atmosphere she breathes,

Broad, clear, and toned harmoniously with skill

That might from Nature have been learnt in the hour

When the lone shepherd sees the morning spread

Upon the mountains. Look at her, whoe'er Thou be, that kindling with a poet's soul Has loved the painter's true promethean craft Intensely."

The pictures were made upon the excellent paper imported by G. Gennert, of New York. For sale by all dealers.

A DISCUSSION ON PRICES.

(Continued from page 209.)

VIII.—TO BE CONTINUED UNTIL THERE IS

A REFORMATION,

REFERENCE to the "Cincinnati Correspondence" will be enough to keep this subject alive this month.

The leaflet promised is now ready, and copies will be sent free. It contains prices from twenty states and of thirty-six photographers. It is called A Quiet Chat on Prices of Photographs. Its introduction is as follows:

Photographers,

This little leaflet has been compiled with the view of helping you to raise your prices. Look it over carefully and see if you cannot make it serve you a good purpose. Nerve yourself up in the matter. Make the effort and you will succeed.

You can have whatever you want on the first and fourth pages of the cover without extra charge. Add your new scale of prices, and get advertisements to help yay you. The rest is stereotyped.

PRICES.

1000	copies,			\$15	00
3000	"			36	00
5000	4.6			50	()()

The following is the preface:

To the Patrons of My Photographic Studio.

In order that I may keep pace with the growth of my art, introduce into my practice the im

provements which come up continuously, maintain my standing as an artist, and gain a fair competence, I am obliged to announce an advance in prices.

In no department of the arts and professions have the costs of production advanced so steadily and largely as in photography. You have but to contrast the photographs of to-day, in finish, style, and general excellence, with those made ten, or even five years ago, to understand this fairly.

A few years ago our negatives were not retouched, and we seut your faces to you either rough and coarse, or so white and black that all the natural undulations of the flesh were destroyed in our manipulation in order to avoid roughness.

Our cards on which the pictures were mounted were also tasteless, inharmonious, of inferior quality, and unfit for use with first-class photographs. Now, we can give you a choice of hundreds of styles, elegant as pieces of jewelry.

Once upon a time the pedestal, the arm-chair, and the curtain composed the assortment of the average studio accessories, entailing stereotype positions and dismal looking portraits. Now, by the help of the very best artists, we can choose harmonious and artistic backgrounds, tasteful and ornamental furniture, and other accessories which enable us to produce not only portraits, but lovely pictures—natural—homelike—beautiful.

By means of modern skylight construction and arrangement, we may also so illuminate our models as to produce results which are as natural as those seen in conversation at your homes, rather than the hideous distortions of old.

The time required for the always nerve-trying operation of "sitting for a picture" has been largely reduced by modern improvement in our manipulation. We can take you now "as quick as a wink."

All this done, the *grand finish*, so much admired, is obtained by a delicately constructed burnishing tool, costly, and difficult to work.

A large list of these extra costs of production could be added, but enough has been said to assure you that they substantially exist.

And yet, withal, during these few years of great improvement and progress in photography, never has our art been so cheapened and degraded by bad workmen and poor productions.

As in everything else, so in photographic materials has the "cheap and nawsty" been catered to, so that it has been made possible to produce some most execrable results, which, nevertheless, are called "photographs."

In appearance they resemble photographs, and an ignorant public is taken in by them just as by inferior silks and boots, and adulterated flour, and spurious articles used in the household.

Such photographs cannot last, for the ones who produce them cannot afford to, and do not take the time to give them that care and attention in the various processes of manufacture which they must have in order to make them last; nor do they use proper chemicals and material.

It is true, some photographers to-day are making good work at extremely low prices; but they are deceiving themselves as to the cost of their productions, and must continue dropping out of the business, or raise their prices.

We who are conscientious only ask a fair compensation for our outlay and our work, and believe you will not think us unreasonable when you read what follows.

A careful table has been arranged of the prices obtained by artists of good repute in twenty States of our Union. Many more could be added were it necessary to illustrate the fact that our new scale is not unfair.

Many you see are higher-very few lower.

By careful attention and by keeping up with all that will make our work the best, we expect to earn all we ask.

In most cases prices are given only for Cabinets and Cartes-de-Visite. In a few, prices of various sizes are added as examples.

You cannot do better than scatter a thousand of these among your customers.

GERMAN CORRESPONDENCE.

Landscape Photography and Amateurs—A Very Simple Instantaneous Shutter—Eosine Plates in Germany and France— Working with Azaline Plates—Photographic Laboratory of the New Technical High School.

The dead season of professional photography has reached its culmination. Everybody is out of town, and landscape photography blooms in all its glory. To be sure, the amateurs are wide awake, besieging hill and forest, meadow and plain, swamps, seas, and mountains. I do not know how it is elsewhere, but in Germany they do not interfere in any manner with the professional photographer. They are in no way dangerous. They do not sell their productions—they give them to their friends. Even

princes of the royal house have buckled on their armor and become knights of the golden camera. In the villa Liegnitz, in Potsdam, as the Potsdam Zeitung recently informed us, an elegant and spacious room has been fitted up, transformed into an atelier, where Prince Henry, son of "Unser Fritz," Crown Prince, pursues his studies in oil-painting. Very often, Prince William and his brother-in-law, Prince Sachsen Meinengen, associate themselves with him in his art studies. Prince Henry is also a photographer. Almost every day he makes excursions into the surrounding country, and takes views of the beautiful landscapes. He affords his subjects the greatest pleasure, inasmuch as he takes their pictures entirely himself, and presents them to each, as a lively memento of his good-heartedness.

Perhaps I may be doing not only the amateurs a service, but also the professionals, by describing a not very novel but still very simple and effective instantaneous shutter which I have used, and with which I have obtained some excellent results. A piece of pasteboard is taken, covered with unglazed dead-black paper, and an oblong opening cut in it, the width of the diameter of the objective. The pasteboard is so held that the slit is above the lens. If an exposure is desired, the board is moved quickly by the hand in front of the objective downwards till the slit is below the lens. An exposure may be made in this manner very rapidly, indeed, more rapidly than with more complicated apparatus. If it is desired to make the arrangement more complete, the pasteboard may be secured to a black sleeve made to fit tightly over the tube of the lens. This shutter has been known for the last three years in England as Vogel's Sleeve. The Photographic News says in connection with it: "It is exceedingly light and convenient, but has the serious fault, which will condenn it in the opinion of many amateurs and dealers, of being neither complicated nor dear." The degree of rapidity of this shutter is easily estimated. By experimenting, I found that with an objective of fourteen lines the duration of motion was only one-fifth of a second. The pasteboard moving in this time was fully nine inches, the width of the slit was also fourteen lines, therefore, the time

of exposure was about one-fortieth of a second. Now, this, for all practical purposes, is rather too rapid; but the little shutter may be made to move slower.

The subject of the so-called isochromatic plates is still daily talk, and the claims to priority of discovery are still looming up in the field.

Recently, Dr. Lohse made some remarks about Eosine plates; immediately appeared a host of claimants. Clayton, who, with Tailfer, has had the plates about a year in the market, calls attention to the fact that eosine plates were patented by him in May, 1883, and adds the following very emphatic remarks: "Hence it follows that this supposed new German discovery is nothing but the repetition of an old French invention." This is about equal to the insult the Patriotic League gave to the German flag at the national festival in Paris. Dr. Lohse never intended to claim any novelty for the eosine plates. He was well aware that Waterhouse, before his time and before Clayton's time, had employed eosine for photographic purposes. Hence, it is no French discovery after all. It is only begging the question for Clayton to urge that he used gelatine while Waterhouse employed collodion. The argument is on a par with that where a new instrument was invented in which the originator made use of beech wood, which another claimed as his own because he substituted a better sort of wood in the manufacture. I have already spoken of the defects of eosine as an optical sensitizer, and how I overcame the difficulty by the use of azaline.

The azaline plates are now upon the platform, and at present are being made in Berlin for trade. For portraiture, those in the market are not yet sensitive enough, but the sensitiveness may be increased in a very simple manner. The chief thing is that the manipulation with the plate be so facilitated that every photographer and skilful amateur may be enabled to take with little trouble paintings with brilliant colors, flowers, and tapestry, in the right intensity of color. If azaline plates be compared with ordinary gelatine plates, by employing ordinary yellow screen, the azaline plates will show great sensitiveness; but in white light, the sensitiveness is less by about one-half or one-

Azaline plates are treated in the same manner as gelatine plates. The only difference is the employment of the yellow screen, and the greatest precaution in the use of the red light in the dark-room. The placing of the plate in the holder must be done in the shadow of a lamp with a red cylinder. After exposure, the plate is put into the oxalate developer and covered for twenty seconds, by which time the colored material is destroyed by the developer, and the plate may be examined for a short time by red light. As the development proceeds, the danger diminishes. Fog is the result of want of care in the employment of the red light. Oil paintings require about double the exposure of water-color paintings. Loescher & Petsch, who have been making use of the azaline plates, recommend longer exposure, and, hence, shorter development; but the time of exposure depends much upon the character of the object. I will soon give you an opportunity to test these plates in I have repeatedly been asked America. whether the pyro developer cannot be used. This question I can answer in the affirmative. I prefer, however, oxalate, inasmuch as it destroys the color, and if pyro is used, the same result can be obtained only by dipping the plates in alcohol before development, and then washing them in water.

The superb building of the Technical High School approaches completion. special space has been set apart for the laboratories, among which the photo-chemical section is accorded a most beautiful situation. It promises to be a pattern for all subsequent buildings designed for like purposes. my next number I shall give full descriptions, accompanied by drawings and plans, but have only space here to say that arrangements have been made for the employment of daylight and the electric light. The arrangement of the latter is after the plan of your renowned countryman, Mr. Kurtz, of New York. Yours truly,

H. W. VOGEL.

BERLIN.

THE restoration of old plates by means of hydrofluoric acid, as given out by Mr. Plener, continues to give very satisfactory results. Several photographers have used the process with satisfaction; and recently a well-known operator, having received a stock of damaged plates, which seemed only fit to throw away, plunged them into a bath composed of commercial hydrofluoric acid, six parts, ordinary water, forty parts. This liquid mixture being placed in a vase of gutta-percha, the plates were plunged into it for ten seconds, and then thoroughly washed.

FORMULÆ FOR USE WITH THE HUB DRY PLATES.

THE "Hub" Dry Plate grows more and more into favor. Since the formulæ for working them are a little special, we give them below:

Developer.

No. 1.

Pyro, .	•		1 ounce.
Salicylic Acid,			30 grains.
Nitrie Acid, C.	P.,	a	30 drops.
Water, .			48 ounces.

Dissolve the salicylic acid and nitric acid in the water, adding the pyro after the salicylic acid has thoroughly dissolved. Filter,

No. 2.

Carbonate of Potas	sa,		2	ounces
Carbonate of Soda	(drie	d),	4	6.6
Sulphite of Soda,			4	66
Water			48	4.6

Equal parts of each of these make a very energetic developer which will require no bromide, but will develop fully and beautifully without fog or stain, and give all the intensity required by simply allowing its actions upon the plate to continue.

The exposure may be shortened for this developer or the developer may be mixed and then diluted with water, if it is desired to give longer exposure.

Always wash thoroughly after developing, and do not allow white light to reach the plate until fully fixed, or a yellow stain will be the result.

Fix in

Hypo, Saturated	Solution,	1	quart.
Powdered Alum,		1	ounce.
Citrie Acid		1	16

After fixing, wash and immerse in a bath of

Javelle Water, . . . 1 ounce.
Water, 16 ounces.

Leave the plate in this for a few minutes and then rinse thoroughly under the tap; this will fully eliminate all traces of hypo, and a plate so treated will not turn yellow or fade.

To prepare Javelle water, take

Carbonate of Soda (Sal), . 14 ounces. Water, 1 gallon.

Boil fifteen minutes and add four ounces of dry chloride of lime; continue to boil a few minutes, allow to cool, and then filter.

Decolorizing or Graying Solution.

Sulphate of Iron, . . 3 ounces.
Citric Acid, . . 1 ounce.
Pulverized Alum, . . 1 "
Water, . . . 20 ounces.

This solution poured over a plate, after fixing, will remove a yellow tinge, or convert a strong printing brown negative into a delicate gray.

Varnish.

The best varnish for dry plates is the following, applied without heat:

White Shellac, . . . 2 ounces.

Gum Sandrac, . . . 1 ounce.

Gum Mastic, . . . 1 "

Oil of Lavender, . . . ½ "

Wood Alcohol (refined), sufficient quantity.

Remarks.

Should opaque spots appear on a plate, soak in a weak solution of oxalic acid until removed.

In using alum between developing and fixing, be careful to wash thoroughly, or corrugations will be the result.

Do not be guided in development by the appearance of the image on the back of the plate; examine by transmitted light and do not allow the shadows to fill up.

Parties can get copies of this to paste on the dark-room wall, from the Hub Dry-Plate Co., Providence, R. I.

At the meeting of the London Photographic Society, Mr. Warnerke said that he had used a method for restoring the oxalate bath which consisted in dissolving therein a little salt of magnesium. By means of the hydrogen produced, which results from this action of the magnesium, the oxidized oxalate bath was restored to its primitive strength, and even beyond. Baths thus treated are extremely active, and give negatives much more intense than those obtained with a developer in its ordinary state. It is evident, however, that this experiment can only be repeated once or twice, as the bath would end by becoming charged with salt of magnesium, and would become more and more weak.

Editor's Table.

IT IS NOT TRUE.—We have heard repeated rumors that we were about to sell the PHILA-DELPHIA PHOTOGRAPHER, and retire from its publication and editorship. It is not true, as our readers and our contemporaries will have more reason than ever to realize after we have attained our editorial majority.

THE Photographic Association of Canada holds its first annual convention and exhibition at Toronto, September 10th, 11th, and 12th, R. E. POOLE, Secretary and Treasurer, St. Catharines. Good success to them.

ITEMS OF NEWS.—Mr. I. R. MARTIN, Paris, Ill., receives a very flattering notice of his studios from the *Chicago Bulletin of Commerce*. The Photographic Society of Great Britain holds its annual exhibition from October 6th to November 13th. Mr. McIntee exhibited the airbrush at the Kit-kat Club, in New York, July 21st.

The Bureau of Information has been enlarged by its publishers, Messrs. Douglass, Thompson & Co. The issue for July is before us, full of information. (Card from Dr. Dio Lewis.)
Office of Dio Lewis's Monthly,
Bible House, New York, Aug. 12, 1884.

MR. EDITOR: I have at length gained possession of my magazine—Dio Lewis's Monthly. Hereafter all communications to its Editor or Publisher, and all business about my books, must be addressed, Dio Dewis, Bible House, New York.

Those who have sent money to others for Dio Lewis's Monthly, or for his books, and have received nothing in return, will please communicate with me at once. Very respectfully,

Dio Lewis.

WILSON'S *Photographics* is a most useful book, and its practical teachings to the studious photographer contain the most valuable information.

PICTURES RECEIVED.—We have just received from Mr. TABER, San Francisco, Cal., a series of instantaneous views of the Bay of San Francisco, which are not only excellent photographically, in the variety and softness of gradations of light and shade, and in the clearness with which the minutest detail is represented, but have the additional charm of artistic beauty. They represent the sea in all its tempestuous lovliness, when "the visitation of the winds"

"Takes the ruffian billows by the top,

Curling their monstrous heads, and hanging them

With deafening clamor in the slippery clouds."

Or, when in its gentler mood, it breaks in ripples upon the "beached margent of the sea." With true artistic sense, Mr. TABER has seized the right moment for securing these beautiful effects. The motion of the scudding yachts, the puffs of smoke from the stacks of the steamers, the curling wreaths which follow the firing of a salute, are represented, not blurred and obscured, but just as they were presented to the eye of the beholder. We have also received from Thomas Pray, Jr., of of Boston, several views of places of interest in Nashville, Tenn. From J. K. MILLER, of Elizabethtown, Pa., portraits well lighted and carefully finished. From Mr. J. H. HAMILTON, of Sioux City, Iowa, a number of stereoscopic views of horses in rapid motion. Mr. Hamilton has also favored us with transparencies of some of his negatives of the wild country of the West, also some stereos of similar subjects, equal to his best work. From Mr. Rosn, of Galveston, Texas, several superb female heads, in which the light-

ings are most artistically conceived, and the tone and finish everything that can be desired. We must not forget the large picture of the Fifth Annual Convention of the P. A. of A. at Cincinnati, which has been kindly sent to us by Mr. INGLIS, of Rochester, N. Y., proving the excellent quality and rapidity of the INGLIS brand of dry plate. It was made with a half second's exposure, No. 8 Euroscope lens, and second smallest stop.

Almost any photographer can get orders for the HELIOTYPPE PRINTING COMPANY, No. 211 Tremont Street, Boston, Mass., and make money. They are producers of illustrations by the most approved photo-mechanical, photolithographic, and photo-engraving processes. They are employed by the United States Government in illustrating scientific and medical reports, by scientific, historical, and other learned societies, by the leading publishers, and for illustrating town and family histories, trade catalogues, show-cards, etc. Facsimiles of medals and coins, ancient manuscripts, paintings, drawings, sketches and autograph circulars, views and portraits from nature, medical and scientific objects, and antiquities are made, and special attention paid to the reproduction of architects', engineers', and surveyors' drawings. Estimates and specimens are furnished on application. Look into it for yourself.

Business Cards, with photographs of the party, were exchanged numerously at Cincinnati.

Mr. M. L. CORMANY, Augusta, Ga., has favored us with some excellent examples of his work. His portraiture is fine. All who want stereo views of the South should send for Mr. CORMANY's catalogue. He was at the Cincinnati Convention.

Wilson's *Photographics* is still the popular book—the many low-priced ones nevertheless. A private letter says:

San Francisco, July 2, 1884.

EDWARD L. WILSON, ESQ.

DEAR SIR: Please send to me by mail, two copies of WILSON'S Photographics, and send to Messsrs A. M. Collins, Son & Co., to be packed with goods to be shipped to me, ten copies of WILSON'S Photographics, and oblige

Yours truly, OSCAR FOSS.

Specialties.

MAKE OUT YOUR OWN BILL, and remit cash with your advertisements, or they will not be inserted.

ADVERTISING RATES FOR SPECIALTIES .- Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line-in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement. Postage-stamps taken.

WE are now located in our four-story and basement, seventy feet deep building. We have a stock of summer accessories on hand. and can deliver backgrounds at short notice, Several new articles, very desirable for Summer, ready.

LAFAYETTE W. SEAVEY.

Ninth St., 1

216 E. Ninth St., N. Y.

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My new studio is fitted up with all the modern improvements, and the most refined demands from a critical public can be satisfied. A visit to my establishment, which has the largest showroom, containing the greatest amount of stock of any place in the world, will be gratefully appreciated.

I have again added numerous new designs to my great variety of patterns for backgrounds and accessories, and keep also in stock a large quantity of goods for parties to select from, saving time and delay on orders.

EVERY photographer in want of excellent lenses, for any purpose, will best serve his interest by consulting the new illustrated price-list of Messrs. Benjamin French & Co. before purchasing.

ROCKWOOD SOLAR PRINTING CO.

17 Union Square, New York.

TIME .- It is our intention that every order received in the morning's mail (when not to be put on stretchers) shall leave this establishment the same day or the following morning. If too late for the morning work, it is sent on the second day. Having our own engine and electric light, we are not at all dependent on the weather.

> GEORGE H. ROCKWOOD, Business Manager.

WILSON'S PHOTOGRAPHICS. **\$4.00.** Post-paid. \$4.00.

THE PLATINOTYPE PROCESS. NOTICE!

Thomas H. McCollin, of Philadelphia, is no longer agent for the sale of materials for

WILLIS'S PLATINOTYPE PROCESS.

Licensees, both amateur and professional, and all who are interested in the process, will please address all orders and communications to Willis & Clements, proprietors of the patents, or to Buchanan, Smedley & Bromley the only authorized general agents for the sale of materials in the United States, 25 North Seventh St., Philadelphia, Pa.

VOGEL'S PROGRESS OF PHOTOGRAPHY. LATEST-BEST-\$3.

WAYMOUTH'S

No. 18. VIGNETTE No. 18.

The old form of No. 18, Waymouth's Vignette Papers, oval, has been discarded, and a new pear-shaped style is now ready in its place. It is a beautiful piece of gradation and prints perfectly. Price \$1.25 per dozen. For sale by all dealers. See advertisement for all sizes.

No. 18. NOW READY. No. 18.

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PORTRAIT ARTIST,

No. 813 Arch Street, Philadelphia, Pa.

CRAYON AND WATER COLOR PORTRAITS.

Solar prints and photographic enlargements furnished and finished in crayon, Indian ink, or water-colors. Photographic coloring on plain or albumenized paper and porcelain. Copies finished in Indian ink and water colors.

References and terms on application.



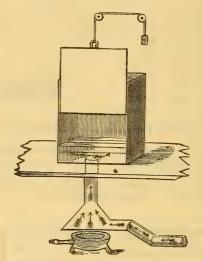
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Address T. W. Power, N. Y., Secretary of Association of Operative Photographers of New York City, for operators, printers, and retouchers, 392 Bowery, or 487 Eighth Avenue.



WILSON'S PHOTOGRAPHICS.

All about emulsion work and plate making-a whole big chapter. See index.

\$4.00

Buy it.

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PORTRAITS IN CRAYON.

The new book by E. Long, on the art of making portraits in crayon on solar enlargements, covers the entire ground, and is sold for the low price of fifty cents. For sale by

EDWARD L. WILSON,

Philadelphia.

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FOR

A. M. COLLINS, SON & CO.'S

No. 26 GILT BEVELLED-EDGE CARDS.

The fancy-shaped mounts now so fashionable among photographers, require metal guides with which to cut the photographs. They are now kept on hand, and can be supplied in the following shapes, and at the prices mentioned:

 Cross.
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For sale by EDWARD L. WILSON, 1125 Chestnut Street.

Philadelphia, Pa.

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THE NEW RECREATION.

Amateur Photography.

By D. J. TAPLEY.

Containing full and explicit instructions, by following which any person of fair intelligence will become a successful photographer. It is pleasantly written, popular in style, and free from technicalities.

PRESS NOTICES.

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"Not published in the interest of any apparatus or dealer, and free from any bias or prejudice."—Publishers' Weekly.

"The author has stated clearly the technicalities, and smoothed the way so that the novice may easily learn the art."—Boston Globe.

"In addition to its value as a manual and trustworthy guide for amateurs, the book is essentially readable, abounding in bright breezy pictures of outdoor life, pervaded by a quiet humor."—N. Y. Star.

"The book is full of good ideas, and acceptable ones, too, because the author is a most enthusiastic and successful amateur, thoroughly acquainted with the subject, knows well apparently the obstacles that lie in the path of the beginner, and has proven himself eminently qualified to point the way to success. His book is bright, and will prove very readable. It is sure to have success."—Philadelphia Photographer.

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Paper, 50 cents. Cloth, \$1. Post-paid.

S. W. GREEN'S SON, Publisher, 69 Beekman St., New York.

For sale by all booksellers and newsmen.

The Photographic Mosaics for 1884 is nearly all gone. Like its predecessors, it contains articles of interest to all persons connected with the art of photography. The introductory article by Edward L. Wilson is teeming with useful information, and should be read to be appreciated. As there is but a limited number of copies printed, those who wish to have a useful as well as ornamental work for their studios, should avail themselves by sending in their orders as quickly as possible. Nearly all gone.

FRENCH'S RELIEF BORDERS.—5 x 8 or Cabinet size reduced to \$1.00 at the Convention. Large sales and small profits is our motto now since our work is well introduced. Secure samples early, and work up a good holiday trade.

C. M. FRENCH, Garrettsville, O.

FOR SALE OR EXCHANGE.—One 9 x 11 landscape and one 9 x 11 interior background, 1 cottage window, steps, and doorway, 1 set tree and base, 1 Japanese screen, 1 garden wall, 1 antique mantle and fire-place. All in fine condition and by the best of makers. I wish to replace with new. Samples of any of these furnished those who mean business.

Chas. E. Smith,

Peoria, Ill.

For Sale.—Wishing to retire from the photographic business, I now offer my well-known establishment for sale, after thirty-eight years' continuous existence in this city.

The reputation of the gallery is too well known to require one word of comment.

The stock of registered negatives is very valuable, containing a large line of regular customers, and also very many of our prominent men, Presidents, Senators, etc., and for which orders are constantly received. They include Blaine and Logan. Entire apparatus first-class; Dallmeyer lens, etc. For further information, address ABRAHAM BOGARDUS & Co.,

872 Broadway, cor. 18th St.

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For Sale.—The finest gallery in New England, in a city of 100,000 inhabitants. Elegantly furnished, large operating-room (with north light), and finely stocked with apparatus and accessories. Established ten years, and doing a good business; best trade in the city. Must be sold, as the proprietor is obliged to go West, by advice of physician. Address

F. B., care Philadelphia Photographer. 1125 Chestnut St., Philadelphia 1864

1884.

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Having met with so large a sale at the Convention, and given such perfect satisfaction, we have concluded to continue receiving cash orders for thirty days at the reduced price, \$7.00.

Give us your orders early, that we may send to the factory all together, as this is the only way you can get one at the price.

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WHAT PROF. HENDERSON SAYS AFTER BUYING ONE.

I have tried your Automatic Retoucher, and it appears to me to meet a want (in our country), and the price is moderate.

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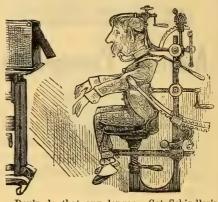
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No charge for advertisements under this head; limited to four lines. Inserted once only, unless by request.

By a young man of good habits and some experience in first-class galleries, as finisher in a first-class country or small town gallery. Address Ed., 422 W. Madison St., Chicago, Ill.

By a first-class retoucher of six years' experience in first-class galleries. Only those desiring a first-class retoucher need apply. Samples of work sent. Address A. D. Mitchell, Clarkes-ville, Tenn.

As printer and toner. Samples and best of reference furnished. Address William Bair, Salem, Columbiana Co., Ohio,

By a young lady thoroughly acquainted with every branch of photography. First-class reference given. Address, stating terms, Miss L. E. M., Philadelphia P. O,

By a good general assistant, will work cheap in the right place, must be a good gallery. South preferred, also large town. Address Assistant, P. O. Box 35, Thomasville, Ga.

Permanently, as operator, in City gallery. Understands all branches of the business thoroughly. Has now charge of a City Gallery. Address L. L. Allen, 174 1st Ave., New York.

By a first class operator and retoucher. Good and temperate habits. Work wet and dry plate, crayon and India ink. Would run or rent gallery. Address "H," care of Lein, Green Street, Bridgeport, Conn.

At once, by a good operator and retoucher. Address E. Lübbers, Lebanon, Ky.

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AN ART JOURNAL FOR PHOTOGRAPHERS.

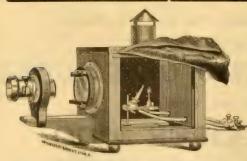
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As Used at the Late Royal Polytechnic, England.

Messrs. WILKINSON & CO. ARTISTS AND OPTICIANS,

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Not merely Colorists of Photographs, as nearly altother slide producers are, beg to draw your special attention to the fact that they can paint any subject, commencing on the bare glass. Any Engraving, Print, Drawing, etc., can be copied as Slides, and most artistically finished. They can also color good Photo. Slides in a far superior manner to any other house. Slides may be had from 3 inches to 10 inches in diameter. As these slides take a good while to do, and are only done to order, customers must order during the summer months. Samples may be had.

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Old or damaged Slides and Apparatus repaired. Condensers for all purposes, any size to order.

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Te cannot recommend it too highly to our colleagues desire to possess a complete photographic library.

IONS. LEON VIDAL, Editor of the Paris Moniteur de

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he success of this latest gem of photographic literawill, no doubt, be as great as the merit of the work erves. Among the photographic writers of America Wilson stands without a compeer. A thorough wledge of the literature, an elegant style of writing, oncise but comprehensive manner of expression, enthusiasm for the object of his efforts, distinguish in a like degree, and he once more claims our aks and admiration by his excellent work Photo-

phics.-DR. H. VOGEL, Editor of the Photo. Mitthei-

y far the best photographic book ever published in erica. It is written with great elegance and masy handling of the subject, and it is very compre-sible. It is magnificently gotten up. The author sacrificed much time and money repeatedly for the herance of photography, and will certainly meet a l-merited success with his new work.—Dr. E. Horn-Editor of *Photographic Correspondez*, Vienna.

lease forward me one more copy of Photographics, have sold the first, and would not be without one triple the price.—Emmerson Goddard, Woonsocket,

should not hesitate to recommend both the style the matter, adapted, as it is, to the novice and the ctical worker.—S. P. TRESIZE, Granville, O.

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t is a perfect encyclopædia of the photographic art to date, and I am much pleased with it.—H. L. ss, Buffalo, N. Y.

Photographics is the most imposing book devoted to tography I have seen.—J. F. Ryder, Cleveland.

Photographics looks fine, and is selling well. We ago our best to push it.—W. IRVING ADAMS, N.Y.

f there is a photographer that cannot get some uable information from this work, he must be exnely well posted.—John F. Singhi, Rockland, Me.

think it will go first-rate. It is an elegant book, ought to go. I recommend it as the best.—T. W. TISON, with H. J. Thompson, Chicago.

he plan of the book is novel. . . . Mr. Wilson could dly fail by this plan in making a useful and pracl publication .- Anthony's Bulletin, N. Y.

Te have no hesitation in saying that Wilson's Phoaphics is an elementary masterpiece from which all not fail to obtain a vast quantity of information. R. SHELTON MACKENZIE, Editor Philadelphia ning News.

is the very best text-book upon our beloved art. some two hundred and twenty-five authorities you e from was a task of itself, and its whole arranget is superb.—John R. Clemons, Phila.

am much pleased with it. It is a valuable com-lium.—W. H. Jackson, Denver, Col.

I have inquiries for a good book on photography, and I think yours is that book .- JOHN CARBUTT, Phila.

It is a pity you can't send to every one the pages from 1 to 17; all would be sure to go for the rest of it. -J. H. HALLENBECK, New York.

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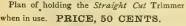
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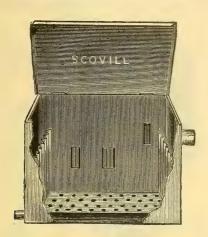
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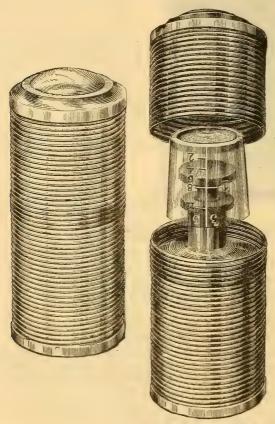
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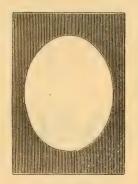
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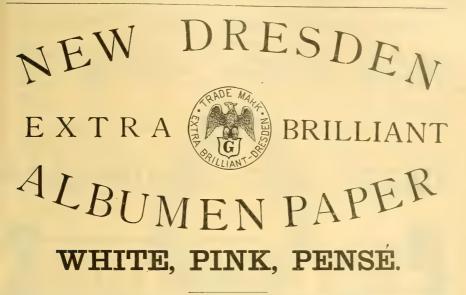
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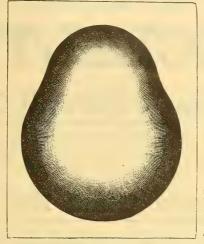
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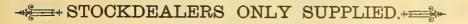
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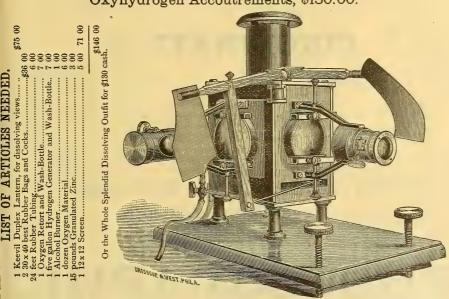
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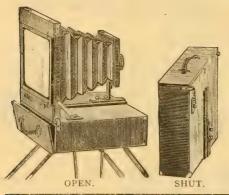
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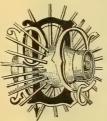
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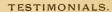
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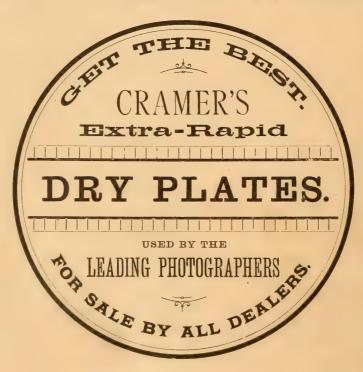
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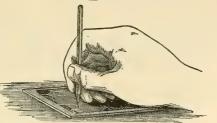
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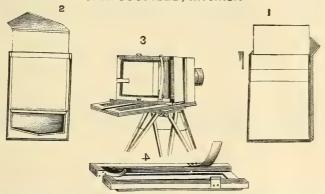
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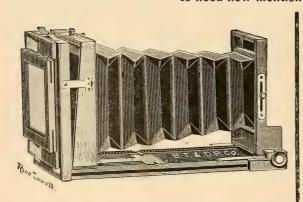
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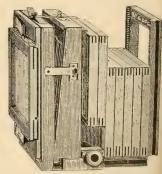
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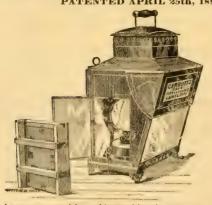
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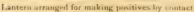
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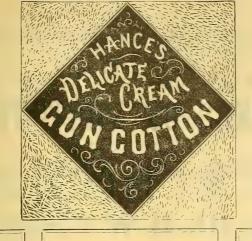






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Philadelphia Photographer.

EDITED BY EDWARD L. WILSON.

Vol. XXI.

OCTOBER, 1884.

No. 250.

THE NEW ORLEANS EXHIBITION.

OUR readers will have been made aware by the Cincinnati correspondence last month, that a strong committee was appointed to see that our art is well taken care of at the New Orleans Exhibition. This committee will undoubtedly organize soon, and we shall report their proceedings.

Certainly a great exhibit must and will be sent to New Orleans, and photographers should begin at once to prepare for it. Full particulars will be given by us from time to time.

An exposition lasting through winter to summer is, indeed, a stupendous novelty, and New Orleans, famous already for her annual carnival pageants which attract thousands of visitors, will undoubtedly become still more so from this colossal exhibition.

Though steam and electricity have brought its ends nearer together than of yore, the world is still a vast affair, and to group its specimen products and specimens of its people in one city and in one park is no light and easy enterprise. Yet reports are current and increasing from day to day that amply substantiate the claims of this announcement.

Not only will the stranger get an opportunity of learning more in one week about the peculiar products of Mexican and Central American countries than he could learn by months of reading or even of travel in those lands, but he will see, side by side with the work of our own factories, the most gorgeous fabrics of Persian looms, the silks of China and India, the lacquer ware of Japan, the curiosities of Siam, and all that can serve to illustrate the habits, customs, arts, and religions of that wondrous East, which has been aptly called the mother of mysteries.

It is hardly exaggeration to say of New Orleans next winter that the world will be there. The World's Exposition began by promising enormous attractions, and is now undoubtedly on the high road to performance. No former enterprise has received such favor or created so wide-spread an interest. Its rapid progress in publicity is almost as wonderful as the progress of its work. Its main building, now finished, is the largest ever erected—thirty-three acres under one roof, a quarter of a mile long and a sixth of a mile wide.

The Horticultural Hall, also close on to completion, is the largest, for that object, ever built, 600 x 194 feet, and designed to display in one pyramid 20,000 plates of fruit, twice as many as were ever grouped before. A Government building 885 x 565 will be erected. Mexico having appropriated \$200,000, has decided to spend half of it in the construction of an iron building; and many other Nations, States, Territories, and cities are demanding space for appropriate structures.

Held under the auspices of the General Government, which has appropriated the sum of \$1,300,000 towards it, and held in a city where the entertainment of visitors has for years been a special glory, a city too, bythe-by, which is the natural portal of Mexico and Central America to the commercial world, this exposition shows every guarantee of opening in accordance with its claim, as the largest and most attractive ever yet proposed. Photography must be well cared for there.

THE NAMES WE WERE CALLED BY THE PRESS HEADLINES.

- "CLANS of the Camera."
- "The 'Now, Look Pleasant' Crew."
- "Taking their own Medicine."
- "The Real in Life Idealized."
- "Shadow-savers."
- "Are you Comfortables?"
- "Artists of the Camera."
- "Visiting Photographers."
- "Then I must Move You's."
- "Photographers."
- "They are Gone."

PRESS PARTICULARS.

WITHOUT the public trumpeting indulged in as a rule by business organizations, they arrived unheralded, bringing with them samples of their appliances and the best specimens of their art. The former occupy the main hall with its stage, also the corridors and vestibule. The finished work of the photographs is displayed in the balcony overlooking the Horticultural Department and in the Art Gallery. There are hundreds upon hundreds of the specimens, comprising all varieties of art, from "life-size direct photographs" down to vignettes. There are collections of views, subjects for artists' studies, colored pictures, and "black and white."

The press of Cincinnati found the Exhibition a little too much for the descriptive talent of its reporters. A flood or a riot or some such trifle as that would have excited all their eloquence. A few excerpts, however, will show how they looked upon things, and will be found interesting.

"On the stage, directly in front of the organ, is perhaps the most curious of all the inventions. It is called the air-brush. Its inventor is there all day giving practical illustrations of its use. Contained in a small hand-machine, looking like a bell-punch, only much lighter in weight, is a quantity of liquid ink. A small rubber tube leads from it to an air-pump worked by a treadle. Stretching blank white paper upon the table, the artist begins working the treadle, and a stream of almost vaporized ink, more delicate in size than the finest cambric needle, is projected through an aperture in the machine upon the paper. An artistic hand with these means rapidly forms a picture exceeding in beauty the best of crayon work. The pictures are marvels of shading and softness."

"The big hall is entirely devoted to the mechanical appliances. One exhibitor, the Scovill Manufacturing Company, has in his display what might be termed a shotgun camera, used principally in taking birds in their flight or animals on the run. The camera, about the size of a cigar-box, is perched upon the end of the barrel, and sight is taken on the object through a telescope three inches in length that rests on the top of the camera. When the bird is covered the operator pulls the trigger, in obedience to which the slide uncovers the lens for an instant, then flies back to its place, and in this brief interval the bird's picture has been secured by the instantaneous plate. Near by is the now celebrated Suter lens. By its use it is now possible to take large pictures with a small lens. Photographers of limited means starting in a small way can compete in size, if not in finish, with the more aristocratic artists. A hundred dollar Suter lens does the work of what formerly cost five hundred dollars."

"The National Photographers' Association may well be proud of its exhibit in Music Hall. Entering the main door, the visitor finds himself immediately in the midst of a wilderness of garden scenes, miniature cottages with latticed windows, Romeo-and-Juliet balconies, cascades, rustic seats, mosscovered logs, and all other accessories that go to make pretty background effects in modern photography.

Motions were as thick this morning as the Vine Street mud.

The ladies of the camera were well represented at the morning's session.

Chairman Kent makes a good presiding officer, and there is no mistake about it.

It is rather a difficult matter to get a second to a motion. It seems all want to have the first.

Some of the photographers came up here on bicycles. But few of them are able to attend the meetings.

The official reporters are kept busy taking down the proceedings, which are of a technical character and difficult of reporting.

The amateur photographer was "numerous" yesterday in the Hall, and their efforts were mainly concentrated on "taking" the best displays.

The delegates were extended an invitation from the Order of Cincinnatus to attend the opening of the Grand Central Station this evening.

Mr. Edward L. Wilson, of the Quaker City, is jotting it down for his paper, The Philadelphia Photographer, the oldest paper of the kind published in the United States.

Mr. D. Clifton Shears, proprietor of the Palace Hotel, made his appearance about noon to-day. When he walked through the centre aisle he is reported to have muttered to himself, "Oh, what appetites!"

Mr. W. C. A. Crowell, of Rochester, Pa., very generally extended an invitation to the members of the Association to have their "picter took" on a 20 x 24 plate, one of the largest plates that can be used.

Mr. Edward L. Wilson, editor of the Philadelphia, is a prominent figure in the Convention. Mr. Wilson is the gentleman whose illustrated lectures on the Orient entertained so many Cincinnatians last winter. He travelled through Europe and parts of Asia and Africa, and stole into the hidden city of Petra, taking photographs at every place visited. His lectures were wonderfully fascinating.

Cincinnati photographers have not distinguished themselves by attentions to the visitors. It is the first convention of any kind in this city where there has been a failure in this respect. Local committees on various duties should have been appointed months ago, so that the details could have been intelligently systematized. Such exhibitions of professional jealousy are unbecoming a city of the first class.

It is estimated that at the present time not less than forty tons of silver and three tons of gold are used annually for photographic purposes in the United States. Taking the amount of gold and silver required for each cabinet picture, and finding the number of pictures that can be made with the amount of gold and silver above named, and the average price for which these cards are sold, it will be learned that the sum of \$27,080,000 is expended annually for portraits.

Mr. W. A. Armstrong, of Milwaukee, has specimens indicative of the true artist.

The newest effect, statuesque photography, is handsomely shown by Mr. C. W. Motes, of Atlanta, Ga.

One of the earliest workers was Dr. John William Draper. His sister, now living, her face plentifully besprinkled with flour, sat for thirty minutes in the full sunlight to obtain a picture.

The "detective camera" is another novel contrivance, exhibited by Messrs. E. & H. T. Anthony & Co. All told, this camera is scarcely as large as an ordinary cigar-box, and can be carried about in the pocket. Its total weight, with lens, shutter, and double dry-plate holder, is only three and oneeighth pounds. A small lens, in the upper left-hand corner, serves to throw the picture, not larger than a postage stamp, on a piece of ground glass on the top of the camera, thus showing the position of the image on the plate. When the picture appears in proper position on the ground-glass, it is only necessary to touch a spring on the side of the camera and "the likeness is took," so to speak. Thus without observation an instantaneous picture may be taken of any person or object, even though they be in rapid motion at the time.

Spurgin, of St. Louis, Seavey's younger, but equally enterprising, rival, is there as well, with acres of canvas representing his work, all of which is exciting praise in the highest.

Grasses of every description, stumps, logs, papier-mache dogs, jointed wooden horses, sleighs, boats, set cottages, carpets, rugs, curtains of tapestry and velvet, patent picture holders, revolving photographic showcases, and all sorts of miniature cameras are among the curious things to be seen; but none are more novel or more interesting, however, than a small machine for printing photographs. This instrument, which closely resembles an ordinary clock, is the invention of a Mormon from Salt Lake City.

Music Hall is at present the largest photograph gallery on the face of the globe. The artists are the thousands of photographers from almost every part of the United States, who have assembled in the Queen City to meet in the fifth annual convention of the National Photographer's Association.

During the course of reading hammering was heard, and the Chair was interrupted. After a little reflection he announced the important fact that he did not prepare an address to be hammered out. [Laughter.]

Every available inch of space is occupied, even Horticultural Hall and the intervening courts being utilized. Just here, between Horticultural and Main Hall, nine splendid dark-rooms have been erected, each suitably supplied with water, shaded light, and every facility for the development of plates. At the west end of Horticultural Hall, beautiful and picturesque with its plants, vines, and living fountains, a spacious platform has been provided. The arching skylight is thus made to do service, and with the curtain, screens, and backgrounds, the appearance is given of a mammoth photographic gallery, which it really is, and where demonstrations will be given each afternoon by President J. H. Kent, Messrs. J. F. Ryder, W. A. Armstrong, and other celebrities in the handling of "sitters" and the management of lights.

After adjournment the reporter strolled out into the main building, inspecting at leisure the many curious things exhibited. The shotgun camera was among the first to which the attention was called. This is a small instrument mounted upon the stock of a gun, and operated much in the same manner. The plates and all having been prepared, the gun is placed to the shoulder,

sight taken through a focussing instrument, and when everything is in readiness, the trigger pulled, and the picture taken.

The air-brush is another new invention both useful and interesting. A little holder is charged with India-ink, and by a bellows operated with a foot-pedal, after the manner of a sewing machine, the fluid is blown upon a faintly outlined portrait, the result giving a picture superior in many respects to the best crayon drawing. A life-size portrait may thus be made in a few hours, whereas formerly by the use of the stump and pencil as many weeks were required. The artist Cole exhibits some splendid work done in this way.

The displays of pictures are large and numerous. Landy has a collection among which are portraits of Murdoch, Archbishop Elder, Mary Anderson, Keene, and Raymond, which, in beauty of workmanship, are not excelled by any in the hall.

Motes, of Atlanta, Ga., has another praise-worthy exhibit. "Summer and Winter," depicted in twelve scenes, by Mr. W. S. Porter, of Covington, attracts considerable attention, as does a group of the famous homesteads of the Colonial period in the vicinity of Boston from 1632 to 1780. The name of the artist is not attached to his work, though it is of the highest order of photographic art.

This afternoon the members and their lady friends left for the Zoological Garden. The evening will be spent in dancing, and as there are fifty gentlemen to one lady, the serious question arises, "Who'll furnish the partners?"

INTERVIEW WITH PRESIDENT KENT.

President Kent said to an Enquirer reporter yesterday: "The Convention is only the smallest end of the annual gathering. The exhibition is the main thing. The display you see in these buildings is as far ahead of last year's at Milwaukee as next year's will be ahead of this one. So rapid are the strides of improvement in photography that it is difficult for a man to keep up. Each year it seems as if perfection must have been reached, but some one is always experimenting and producing wonderful and unlooked-for results. One of the

great needs just now is something to prevent pictures from fading. We know the cause, but must submit to it, for the present at least."

Nor must dry plates be omitted. Cincinnati exhibitors are scarce. Was it because they were afraid to stand the test of comparison? The specimens are magnificent, and it seems a pity that they should be on exhibition but three days. By this afternoon the entire display will be in apple-pie order.

The general public, as it seems, has not as yet awakened to the fact that a great exposition is now in progress at Music Hall. A photographers' convention it is called, but, as was set forth in these columns yesterday, it is more in the nature of a grand and mammoth display of instruments, accessories, supplies, and specimens of the best results obtained by these in the hands of skilful operators, rather than a conclave of wrangling artists and manufacturers engaged in the discussion of subjects of no interest whatever to the non-professional.

A good-sized platform has been erected in Horticultural Hall for practice use during the Convention. To-day and to-morrow several eminent photographers will use the platform in giving exhibitions of lighting, posing, and sitting, and particularly of the management of sitters, which is an art in itself.

A rented room covered with a cheap carpet, two or three chairs, a camera, some panes of glass, and a few old dirty bottles in a dark closet, comprise, in the belief of many, a photographer's outfit. Such persons would find out their mistake by visiting Music Hall within the ensuing three days, and there see the multiplicity of devices used by the photographers who are here in attendance upon the National Convention which began yesterday.

There are plenty of experiments going on in almost every part of the hall.

The flood pictures on exhibition recall to the passer-by dismal reminiscences.

A simple white badge with golden fringe costs the delegates just two dollars.

Messrs. E. & H. T. Anthony are obliging the visitors with neat memorandum books.

The entertainment prepared for the mem-

bers of the Convention consists of fire and monkeys, and—yes, of thirty-five cents.

The real idealized was given a splendid illustration at Music Hall yesterday. Just before the Convention of Photographers started for their little excursion to the Zoo, the delegates were all assembled upon the steps of the great Springer edifice, in order to have a picture taken of them in a group. A huge camera was gotten ready upon the opposite side of the street, at the Washington Park gate, which was to be operated by Mr. Inglis, of Rochester, N. Y., while Mr. Seavey, the famous background painter, arranged the "sitters." Then the fun began. All the street Arabs, pan-fish, hoodlums, and stragglers from the park began to push to the fore. All of course had something to say, while amid the babel of voices the shrill whistle of the small boy could be heard, and cat-calls and peals of laughter so augmented the frightful din that chaos seemed come Then other photographers broke from the crowd, and, seizing cameras, lenses, and plates, sought out convenient places, and in less time than is required in the relation, upward of twenty boxes were in operation, varying from the diminutive detective camera to the size of an ordinary dry goods box. Street cars and wagons rushed to and fro between the operators and the group, thus increasing the confusion, and many fleeting moments galloped by before Mr. Seavey called "All ready! Go!" and in another half second, the caps were off the lenses, the shutters clicked, the plates flashed from the boxes, and the howling mob, quieted only for a second, were shown up in miniature as the most orderly assemblage imaginable. Pan-fish and all were so idealized, that there, in the sombre shadows of the stately temple of art and song, one saw a gathering representative of the refinement, intelligence, and civilization of the nineteenth century.

Inglis, Weingartner, Rombach, Monroe, Allen, Wardlaw, Kent, and many other famous photographers secured negatives, and while the band on the balcony still tooted its inspiring strains, there was a general scampering for the "dark-rooms," where the developments were made.

The march to the Zoo then began, dozens

carrying with them cameras, intending to secure pictures of the animals and birds of that famous garden.

VICE-PRESIDENTS OF THE P. A. OF A. FOR 1884.

New Hampshire: W. G. E. Kimble, Concord.

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Massachusetts: M. V. Foster, New Bedford.

Rhode Island: G. M. Carlisle, Providence.

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Kentucky: E. Johnson, Lexington. Illinois: Joshua Smith, Chicago.

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Wisconsin: S. L. Stein, Milwaukee. Iowa: J. H. Reed, Clinton.

Minnesota: E. S. Kibby, Rochester.

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Wroming Torritory

Wyoming Territory: F. M. Baker, Carbon.

Nebraska: E. F. Eaton, Omaha.

Kansas: S. L. Conklin, Atchison.

Missouri: Fitz Guerin, St. Louis.

Arkansas: T. W. Banks, Little Rock. Tennessee: — McCormick, Clarksville.

Mississippi: A. L. Blanks, Vicksburg. Georgia: E. W. Motes, Atlanta.

Alabama: Charles E. Wallin, Montgomery.

Canada: - Poole, St. Catherines, Ont.

OUR CALIFORNIA LETTER.

The Philadelphia Photographer for June, No. 246, did not reach me, and though it is now the glorious "Fourth of America," has not yet come; and as the customers are all off celebrating—where, by the way, I ought to be—time can now be taken to tell you of this great mistake

our wonderful post-office has made; it is not every day one can let the lines drop to do writing.

Us humans are a queer set, we cannot realize the full value of any good thing until deprived of it a while; water, food, and fresh air are generally in plentiful supply, and we hardly ever think of their value, but once let a scarcity of any one of these necessaries of life come upon us, and then we know what is the uppermost idea of the mind. Contrast is what makes the picture, either real or ideal. So it has been with me in regard to the "P. P." the last month; just because it missed coming, it has been thought of and wanted more than any other paper, and its real value more than ever realized. I do not want more than one month to pass without knowing what is taking place in the photographic world. I have the complete volumes since 1877, with the exception of 1878, and intend to get that as soon as possible, as I find it pays to look them over once in a while, as old ideas forgotten or new ones not before noticed are most sure to come to the mind.

Lately I have been bothered with a north-west light, and have been looking over the old Photographers to see what has been said about such nuisances, or whether anyone else ever had experiences to match mine, not so much because of the saying that "misery loves company," and for the want of such poor comfort, but to see if a team could be found to pull me out of the mud. Am not sure, but I did smile at the fellow who had a light clear around to the west, and was rather glad to know mine is not the worst skylight in existence. If it be possible for any one who edits or reads the P. P. to throw any light on this very poor light, so as to enable me to see to use it to advantage, I shall be very thankful. My confirmed opinion at present, is, that it is not possible to do the best work with it unless for a short time in the morning, just the time when ladies and babies, and in fact the best and most populous portion of photographic customers cannot come. People are more at leisure in the afternoon, and unless some of the bright lights of our art say this light can be managed to advantage in the afternoon, it will have to be

moved to some locality where a northern exposure can be had. Why would it not be still better when practicable, to veer around somewhat to the northeast, and thus keep out the sun from the side light all the time. Practical questions of business ought to become a prominent feature of our journal. I was much interested in the few questions already propounded, and wish for more, especially the answers. There is much for us all to learn, yet, and I think it would be a good idea to consider the P. P. a telephone and go to talking to each other with it in an easy conversational manner, as we would if making an evening visit.

Do not forget to send me that long missed June number, as I cannot afford to have a break in the volume.

> Yours photographically, R. E. Wood.

St. Helena, Napa Co., Cala.

THE LATE MR. C. JABEZ HUGHES.

THE late Mr. Jabez Hughes, whose decease we announced a fortnight ago, and whose portrait we present in the present number, was interred on the 14th instant at Abney Park Cemetery, side by side with his only son, the late Alfred J. Hughes, and within but a short distance of more than one old friend. By the special request of Mrs. Hughes, the arrangements were made as quietly as possible, and consequently the ceremony did not partake of the public character that would have been expected in the case of one so well known and universally esteemed as Mr. Hughes. Her Majesty, immediately upon hearing of the death, addressed an autograph letter of condolence to Mrs. Hughes, and also forwarded a beautiful wreath for the coffin. The latter was of polished oak, and bore at the foot a plain brass plate with the inscription, "Cornelius Jabez Hughes, died 11th August, 1884."

The late Mr. Hughes was born in London in 1819, and when quite young took great interest in debating societies and similar associations. He became a lecturer, and teacher on memory, and in that capacity made the acquaintance of Mr. J. E. Mayall, then in business in the Strand as a

daguerrotypist, whose secretary he became, and with whom he obtained his first knowledge of photography. After remaining two or three years with Mr. Mayall, Mr. Hughes, in 1849, established himself as a daguerrotypist in Glasgow, purchasing the business of Mr. Barnard, in Buchanan Street, which he raised to the front rank in that city. Though strictly a daguerrotypist during his sojourn in Glasgow, he adopted and worked the collodion process to a small extent soon after its introduction. In 1855 he returned to London and commenced business as a photographer in the Strand, working here nothing but the collodion process, but this venture not proving a success, in 1859 he opened a warehouse in Oxford Street. He was one of the earliest to recognize the future field for photography which the "carte mania" foreshadowed, and as the business of a dealer was not congenial to his temperament, he cast about for a new opening as a photographer. This presented itself toward the end of 1861, when, upon the death of Mr. Lacy, of Ryde, the business was offered for sale, and Mr. Hughes became the purchaser, being succeeded in Oxford Street by his friend and previous manager, Mr. John Werge. He very shortly afterwards rebuilt the studio and reception-rooms in the Arcade, Ryde, erecting in their stead the handsome suite of business premises that have since become recognized as amongst the most perfect in the kingdom.

His contiguity to Osborne, and the highclass character of his productions, secured for Mr. Hughes the patronage of the Queen, for whom he executed a large amount of work. One of the latest pictures taken for Her Majesty, a copy of which is in our possession, consists of a group of twenty figures —composed of the Queen, her children, and grandchildren. By order of Her Majesty, Mr. Hughes produced a series of portraits of the late Earl of Beaconsfield, which are said by those who were personally acquainted with the late Earl to be the most truthful portraits of him produced in late

Ever ready to avail himself of what seemed to be improvements, Mr. Hughes some years ago adopted the carbon process to the almost entire exclusion of silver printing from his establishment; new forms and sizes of pictures were also readily taken up if they possessed the features of artistic novelty.

The death of his only son in 1878 was a great blow to Mr. Hughes, and since that time he had never recovered his old business energy, though he was seldom absent from the meetings of the societies, much of his time being spent in London. His long photographic connection with the metropolis had necessarily familiarized him with all the societies, in the management of most of which he had taken part. We find his name on the committee of the now defunct North London Photographic Association up to 1862; he was on the council of the parent Society from 1866 to 1871 inclusive, and again from 1876 until last year. He was also a vice-president of the South London Photographic Society from 1873 until the time of his death, and though not an officer of the Photographic Club, he presided at the inaugural meeting, journeying from Ryde for the purpose, and never missed the ordinary meetings when he happened to be in town. He was, in addition, one of the oldest members of the Solar Club.

In connection with the literature of photography, Mr. Hughes was also well known, for, in addition to the numerous papers read, and articles contributed to our columns, he was a constant speaker at the various meetings he attended, being ever ready to share with others the knowledge his extended experience had given him. There was not a branch of photography—scarcely a branch of science—on which he was not qualified to speak, and the fluency of his diction combined to render his discourses especially interesting and instructive.

But the chief work by which he will be remembered is his Principles and Practice of Photography, originally published in 1860, and which has run through many editions. This is, perhaps, the most complete practical instruction book that has ever been published in connection with photography, as, while dealing with every branch of the science, it gives descriptive details without prolixity and without shirking minor points, while it is a model of conciseness.

Our portrait is an ink-photo from a photograph taken in Mr. Hughes's own establishment at Ryde, I. W.

[We reproduce on our cover this portrait of our lamented friend. Through a long series of years we found him a most amiable and obliging correspondent. Photography can but ill afford to lose such men. We mourn over this loss as that of a personal loss not soon to be recovered from.—Ed. P. P.]

A GOOD POTASH DEVELOPER.

AT a late meeting of the New York Amateur Society Mr. F. C. Beach gave a formula for a potash developer, with which he had had much success. It is well adapted for instantaneous plates.

No. 1. Pyro Solution.

Warm distilled or melted ice water . 2 ozs. Chem. pure sulphite soda (437 grs. to oz.) 2 ozs. When cool add: sulphurous acid . . 2 ozs. And finally add: pyrogallol (Shering's)

 $\frac{1}{2}$ oz. or 218 grs.

which is done by pouring the sulphite solution into the pyro bath, repeating the pouring until the pyro is dissolved. The solution which will now measure five fluidounces, should be filtered, and will contain 44 grains of pyro to each ounce.

No. 2. Potash Solution

is prepared by making two separate solutions as follows:

	Water	,			4 (ozs.
α	Chem. pure carbonate	of pot	ash (4	137		
	$\left\{ \begin{aligned} & \text{Water} & \cdot & \cdot & \cdot \\ & \text{Chem. pure carbonate} \\ & \text{grs. to the oz.} \right) . \end{aligned} \right.$				3 (ozs.
	$\begin{cases} \text{Warm water} & . \\ \text{Chemically pure sul}_{1} \\ \text{(437 grs. to oz.)} \end{cases}$				3 (ozs.
b	Chemically pure sulp	hite	of se	da		
	(437 grs. to oz.)				2 (ZS.

a and b are next combined in one concentrated solution, a small quantity of which when mixed with the pyro will be sufficient to develop 3 or 4 plates. The strength of the solution will be uniform, and it will measure between eight and nine fluidounces.

Supposing a plate to have been greatly overexposed, or properly timed, or the length of the exposure is unknown, to develop a 5 x 8 plate take 2 ounces of water and add thereto 3 drachms of No. 1, and from ½ to 1

drachm of No. 2, of the potash solution. Then pour the solution upon the plate; after a minute's interval, should no part of the image appear add a second drachm of No. 2, putting it into the graduate first, and then pouring the developer from the tray into the graduate. The solution is again flowed over the plate, and if after a minute's interval no image appears, repeat by adding a drachm of No. 2 at a time, until development commences. In this way the picture will be brought out very gradually, the development will be under perfect control, and can be prolonged until all details appear, without the slightest danger of fogging the The principle involved is to add sufficient pyro at first to give proper density, and then add minute quantities of the alkali at stated intervals until the right strength is reached to commence the development.

In place of the No. 1, or the pyro in solution, dry pyro may be used with good effect, 6 to 8 grains being sufficient for 2 ounces of

If a plate has had what is termed a drop-shutter exposure, or, in other words, an instantaneous exposure, to 2 ounces of water add $3\frac{1}{2}$ drachms of No. 1 and 3 drachms of No. 2, increasing it a drachm at a time, in case the shadows fail to come out, up to 5 drachms.

The sky will appear rapidly, but the dark portions will develop gradually.

Brilliant, clear, bluish-gray quick printing negatives are produced with this developer on almost any brand of plate, the necessity of using clearing solutions is avoided, and all chance of stain to the negative disappears. The developing solution remains clear, and from four to eight plates may be developed successively in it at one time. Should the negatives be too dense, the amount of No. 1 may be decreased a third to a half.

Among the advantages claimed for the developer are simplicity, certainty of uniform action, and production of clear negatives. The solutions being in concentrated form may be kept in small bottles, convenient for handling.

Now is the time to send in your orders for *Mosaics*.

PHOTOGRAPHING INSIDE A COAL MINE.

EVEN in direct sunshine one would hardly undertake to photograph a heap of anthracite coal, and yet Mr. George M. Bretz, of Pottsville, Pa., one of our oldest subscribers, has succeeded in making some admirable views of the interior of a coal mine, far beneath the surface of the earth, and far underground from the descending shaft.

Mr. James M. Whiting, Superintendent of the Reading Coal and Iron Company, also one of our oldest subscribers, and an amateur photographer, gave Mr. Bretz every facility, as will be seen below. The whole story is enthusiastically told by several reporters, and since the event marks an important step in photographic progress, we gladly place on record here an account of the transaction made up from the several sources supplied us by Mr. Bretz, whom we congratulate on his pluck and on his success:

Last evening, Mr. Bretz, in company with Mr. James Temple Brown, agent of the Smithsonian Institute, returned from Shenandoah to Pottsville, the happiest men in ten counties. The object of Mr. Brown's visit to the coal regions is the collection of specimens of coal deposits, and colliery utensils and apparatus for exhibition at the New Orleans Exposition. What with specimens of coal deposits and colliery tools and machinery, there was one link in the chain missing. The breaker, with all its machinery, could be photographed, or, if desired, a miniature breaker in its entirety could be made; this would show only the preparation of the coal for the market. What Mr. Brown desired was to get back one step further, and show the actual digging of the coal in the breast. An imaginary coal breast might be produced, but Mr. Brown wanted the picture from nature. As Mr. Bretz was engaged to photograph other parts of the colliery, he desired to know whether there was any way of getting a photograph of the interior. It was a suggestion that put Mr. Bretz to thinking, and kept him thinking for a week. He determined to make the experiment. If he succeeded, he would not only oblige his friend Brown and the Smithsonian Institute, and make a valuable acquisition to scientific knowledge, but would have the proud satisfaction of knowing that he had been successful in an unprecedented experiment. The idea of a photograph by electricity suggested itself, and a consultation was had with Mr. Whiting, Richard W. Kear, and others. The result was that it was resolved to make the experiment. Mr. Kear, who is connected with the Arnoux Electric Light Company, kindly volunteered not only to supply the plant, but take the entire charge of its erection and operation. The Kohinoor colliery at Shenandoah was selected as the scene of operations. The mine is worked by the Philadelphia Coal and Iron Company, and Mr. Whiting gave the operators every possible facility for the success of their experiments.

The apparatus, when ready for operation, was taken down into the mine by sections. The plant was placed on East slope, No. 1 lift, at the foot of what is known as the long slant gangway, about five hundred feet below the surface. From this point lines were run to breast 39, which is about forty feet high and sixty feet from the face to the entrance from gangway. The engine was to be run by compressed air. Five lights were then erected in the breast, and everything was in readiness for the experiment. The engine was started, and at 8.45 o'clock Wednesday night the electricity was turned on. The effect was grand. These underground chambers had never before been illuminated by other than the dull blaze of a miner's lamp. Through its agency the workman's eye was able to take in a radius of a few yards, and then only because it had so accommodated itself by experience. But here was light brighter than day, five hundred feet below the surface! The breast, from the entrance to the face, and from the floor to the dome, so to speak, was brighter than your own parlor under gaslight. This exposure lasted ten minutes, during which time Mr. Bretz's camera was turned upon the beautiful scene. The experiment, to his great satisfaction, was a complete success, the negative showing beautifully the whole interior of workings. The experi-

ments were repeated with equally good results. The exposures lasted from ten to thirty minutes each. Eight exposures were made and five negatives taken. The first, second, and third views show the naked interior of the breast from different positions. The fourth exposure shows, three miners at work, one using the hand-drill, another cutting coal, and the third loading coal into a mine wagon. The fifth exposure shows a man working the boring machine, or coal auger. The object of the sixth view was to show the entrance to the breast from gangway, exposing the props and track. David R. Reese, the mine boss, occupies a conspicuous position in this view, but he paid dearly for the honor. The object of giving him a place in it was to use him as a rule of measurement, but in order to get into the picture it was necessary for him to remain in the one position for the space of thirty minutes, the time occupied in taking the picture. He choose a painful attitude, but had to maintain it. He did it without a break. By the eighth exposure a beautiful view of the electric plant, showing the Arnoux light and engine was taken. These experiments, as we have stated, were commenced night before last, and completed yesterday. The negatives indicate that the pictures will be first-class. They will not only be a valuable addition to the curiosities of the Smithsonian Institution, but will be of equal interest to our own people. Mr. Bretz may well feel proud of his achievement, and Mr. Brown can report to the department with peculiar satisfaction, for had it not been for the latter's persistence in getting down to the very beginning of things, the work would not have been undertaken.

The views that were taken we believe to be the first that were ever taken in a coal mine by electric light on this side of the Atlantic, and Messrs. Brown, Bretz, and Kear, and all associated with them, may feel proud of their share in the enterprise. Those who may chance to see the views will be afforded a rich treat, as they are not only representations of a coal mine under ordinary conditions, but they exhibit the nature of a working breast to far better advantage than the miner himself can see it

with the ordinary light. The roof of the breast wherein the views were taken can be but faintly seen, if it can be seen at all with the ordinary miners' lamps, so that the views will not only be of interest to the general public, but miners themselves will appreciate them for their rareness and excellence. People will be generally interested in them also, because the breast photographed is one of unusually large dimensions, even for an anthracite colliery, although the working places in this region, as a rule, are larger than they are anywhere else in the world.

OBITUARY.

THE Abbé Moigno, of Paris, is dead. A man in whom talent of the highest order was united with a purity of heart and an earnestness of purpose. His mind rose superior to the narrow principles of the sect in which he was educated. Though a Roman Catholic by profession, he was exceedingly broad and liberal in his views, and bold in the defence of truth, no matter how much it clashed with prejudices and preconceived opinions. With him truth was the ultimate goal of his endeavors, and he feared not truth.

His advanced opinion subjected him to persecution. Not a corporal persecution, for the days of bodily torment for defence of truth are past, but there is a social persecution under which sensitive minds suffer intensely. Though sincere in his religious opinions, they never warped his mind. He was ever bold in defending what he considered to be true, no matter though it should be opposed to the views of his Jesuit brethren.

He advocated the theory of the divine inspiration of the Great Pyramid of Cheops, and became a member of the Society which supports this doctrine, though by so doing he met with the displeasure of his fraternity and of the French people.

He was forced to resign his position as editor of the *Cosmos les Mondes*, a paper for whose welfare he had labored for years.

The Abbé F. Moigno, Canon of the Second Order of the Chapter of St. Denis, was born at Guemene (Morbium), in the

year 1804. Son of a gentleman of Brittany, Moigno de Villebeau, who abandoned his title of nobility in the French Revolution. Having joined the Order of Jesuits, he was forced to retire from it, in 1844, because the publication of his Lessons on Differential and Integral Calculus was opposed to the views of the Superior of his Order; the Abbé preferring to go out of his Order rather than renounce his independence of thought.

He was a contributor to a number of Parisian journals, and finally established a journal of his own, *The Cosmos*, which he afterwards joined to a paper, *Les Mondes*, the two being united under the title *Cosmos les Mondes*.

The relation in which he stood to men of science may be appreciated when we know that he was the friend of Ampère, Arago, Binet, Beaudant, Thinard, Humboldt, Dumas, and other distinguished men.

He held many important positions of trust and honor, and, in 1873, was made Canon of the Chapter of St. Dennis. He was Chevalier of the Legion of Honor.

Among his important publications we may cite the treatise on the *Electric Telegraph*, a work on *Optics*, *A Course of Science*, a work on *Physics and Chemistry*, and above all his great work, *The Splendors of Faith*.

He had travelled all over the world, and spoke fluently twelve languages.

It was also his intention to translate Prazzie Smyth's great work, Our Inheritance in the Great Pyramid, but death closed his mortal labors ere his work was accomplished.

OUR PICTURE.

No doubt it is a source of great satisfaction to every true-spirited photographer, that year by year photography is forcing its way further and further into the domain of art, so that now there are few painters who are not candid enough to acknowledge not only the great service rendered by it to art, but also to admit its productions to a place amongst their own as genuine works of art in themselves.

To what is this triumph due? Surely not wholly to the great perfection in the

details of processes of a purely mechanical character, for this excellency in technical quality was effected years ago. But essentially to the artistic feeling which has been engendered, manifesting itself in the daily routine work of those who have an appreciation of its value as the great factor in success.

We are, it is true, capable of performing technical operations by modern processes which were never dreamed of twenty years ago, but the chemical quality of the work is not very much better than the productions of the days that are past.

It may be difficult to attain a high artistic standard in every-day work, but it can be accomplished. The old complaint that it does not pay to make artistic work, can no longer be pleaded in excuse for poor or even indifferent work. The photographer who fails, is he who will not advance with the times. The production of even ten years ago will not suit the standard of today. Our exhibitions every year exclude more and more works partaking too much of trade productions and too little of art, and to help this wise advance in the right direction should be the aim of every photographer. It is therefore with pleasure that we are enabled from time to time to give our readers productions of those photographers who are foremost in the ranks of art, and who have been barriers against the inundation of cheap prices and necessarily inferior work. Messrs. Gilbert & Bacon, with whose production we are favored this month, have chosen a very graceful subject for representation-Miss Effic Ellsler, so widely known for her excellent characterization in the pathetic drama of Hazel Kirke.

A portrait, like a poem, has always an additional interest when we are acquainted with the subject. The wonderful sonnets of Shakespeare would be of greater value to us were the love to whom they are addressed known to us. And so when the photographer or painter gives us some object with which we are familiar, and not an ideal representation, we feel that we are better able to appreciate its excellences and to enter into the spirit of the conception. It is like judging of a familiar friend.

Messrs, Gilbert & Bacon have succeeded in translating the language of expression in the countenance of this pleasing actress. No less have they displayed by the attitude of the figure the sentiment which animated her at the special moment. There is a mixture of feeling and good humor which is true to nature, yet an individuality about the expression which brings up vividly before our minds the scenes in which she played her part.

The negatives from which these photographs were made were by the old wet process, yet the work, from a chemical standpoint, is not inferior to our best dry-plate work, thus proving our assertion that artistic excellency is at present the banner under which advanced photographers have enlisted.

The prints were made upon Mr. Gennert's excellent brand of albumen paper, in our own establishment, 1125 Chestnut Street.

THE INTERNATIONAL INVEN-TIONS EXHIBITION.

This Exhibition will open in London, in May, 1885, and continue open half a year Full particulars can be had at the offices—Exhibition Road, S. Kensington, S.W., London, England.

Photography is Group XXIX., and classed as follows:

CLASS 159. Processes and their results.—Methods of gelatino-bromide plate-making, apparatus for making emulsion, apparatus for separating the sensitive constituent, coating drying, and packing machines; emulsion and other processes; printing processes, silver, carbon, Woodburytype, platinotype, gelatino-bromide, collodio-chloride of silver, etc.; apparatus for washing, etc.; prints and negatives; methods for making photographic lantern slides.

Class 160. Apparatus (excluding lenses).—Cameras, shutters, changing-boxes, slides, tents, lamps; apparatus for making enlargements and for micro-photography.

CLASS 161. Application of Photography to various purposes, Typography, Ceramics, Relief-moulds, etc.—Method of producing printing surfaces; photographic enamels, photographic printing on pottery; photographic reliefs. Use of photography in

self-recording apparatus, in scientific observations, etc.

Class 148. Includes lenses.

Class 140. Includes Photo-mechanical printing.

THE AMERICAN OPTICAL CO.'S NEW WORKS.

SOMETIMES a fire, though it paralyzes trade for a time, does a great deal of good.

Such has been the result of the fire which destroyed the works of the American Optical Co., a few months ago, because new and better quarters have been found, and everything is going on more prosperously than ever.

We visited this new factory recently, and, escorted by its able foreman Mons. Flammang, saw its workings. It seems to be about perfect now.

Here are over eighty men at work, manufacturing apparatus for the use of photographers. Two of these men are wholly occupied in sweeping up the shavings and chips which result from the work of the others. And what a busy scene is presented.

First we see piles of seasoned wood, which are attacked by saw-men; dove-tailers; gluemen; men who, instead of the plane, use a great grindstone for polishing true the various delicate parts of the camera and the holders, until the semblance of a camera is attained. Then to their work is joined that of the bellows-maker; the metal parts are attached; and, finally, the varnisher and finisher have their turn in the good work.

Some of the machines used are not only powerful, but intricate. Of the former class, the card-cutter is one. Of the latter, the small, but ingenious, machine for cutting the racks and pinions of the camera movements. And the holders—"holders! holders!—like wolves they continually cry for holders," said Mons. Flammang, as he pointed to "great stacks of holders," of all sizes, "ready to go to the store of the proprietors—Scovill Manufacturing Co. I should have one hundred men busy to satisfy their demands for holders, but I cannot get them."

We saw a splendid 14 x 17 outfit "get ip," for the last touches previous to being

sent to Guatemala, S. A. And on all sides were stacks of cameras in the various stages of manufacture. There were not many finished ones here, for the orders are always ahead, and the stock is removed to the store for shipment as quickly as it is ready.

Altogether this new factory is one of the most interesting and busy places we have ever seen, and it is largely due to the push and faith in our art of Mr. W. Irving Adams, the well-known agent of both concerns.

A STILL BETTER LIBRARY.

WE have the following from one of our intelligent readers in Seattle, W. T., and the cause of his intelligence may be discovered in his letter. Such men are bound to succeed. We want *More* as well as *Moore*. He writes:

"Our friend Matzger, of Dayton, W. T., 'flatters himself that he has the best photographic library in Oregon or Washington Territory.' Now, while I don't flatter myself that I have the best photo library in the United States, I think I have one of the best and considerably larger than his Following is my catalogue:

Philadelphia Photographer from 1866 to 1884 inclusive, bound.

Philadelphia World, vols. 1 and 2, bound. St. Louis Practical, 1878 to 1882 inclusive. St. Louis Photographer, 1883 and 1884.

Walzl's Photographer's Friend, 1872, 1873, and 1874.

Anthony's Bulletin, 1872, 1873, and 1875. Photo Times, 1881, 1882, and 1884.

Western Photo News, 1874, 1875, and 1876.

Mosaics, since 1870.

British Journal Almanac, since 1873.

Year Book of Photography, since 1873.

Vogel's Hand-Book.

Hearn's Practical Printer.

Silver Sunbeam.

Wilson's Photographics.

Robinson's Pictorial Effect.

Anderson's Skylight and Dark-room.

John Burnett's Practical Hints on Painting.

John Ruskin's Lectures on Art, etc.

Pretty good library, isn't it? Situated as

I have been for years, where I could see but little, my library has been my life, and is the secret of the good work which brings me compliments from many Eastern and European people of culture.

Yours very truly,

GEO. N. MOORE."

Frequently examples of his excellent work, received from Mr. Moore, shows him to be among our "best."

WHERE OUR PAPER COMES FROM.

THE door was absolutely blockaded as we tried to enter it, by great cases of albumen paper that had just arrived from Dresden, and were being packed.

Of course, we allude to the door of the new store of Mr. G. Gennert, No. 54 East 10th Street, New York, whence cometh all the fine albumen paper of "satin" finish used for "Our Picture."

Mr. Gennert's new quarters are light, airy, convenient, and splendidly located. Cleanliness too seems to be one of the chief rules of this well-regulated establishment, for the place is absolutely clean.

On exhibition were the splendid Austrian pictures, which attracted so much attention at Cincinnati, printed on "satin" paper.

A new importation of porcelain ware had just arrived, and the "Cramer" and "St. Louis" plates were going out in great quantities.

Mr. Gennert seemed quite contented with business prospects, and with his new and beautiful store.

Mr. John Barnett manufactures holders, etc., in one of the apartments of the same building. Success to all.

SOCIETY GOSSIP.

Photographic Society of Philadelphia.—The regular meeting was held on Wednesday evening, September 3d. Mr. John C. Browne in the Chair.

Mr. Wood mentioned that he had experimented with some pyro and soda developer, which after use had been left standing a day or two, and found that it had deteriorated but little. Though its action was slower,

.he was quite successful in devoloping other plates with it.

Mr. Carbutt stated that he had used the same developer after keeping it a week, it being preserved by the citric acid and sulphite of soda contained in the mixture.

A number of interesting views taken in the Kohinoor Mine, by Mr. George M. Bretz, Pottsville, were shown by Mr. Carbutt. The light was supplied by five electric lamps, operated by a dynamo in the mine driven by compressed air. The exposures varied from eight to thirty minutes. These are supposed to be the first pictures ever taken in a coal-mine, by electric light, in this country.

Messrs. Wilson, Hood & Co. presented a fine instantaneous view of the yacht "Gracie," taken in New York harbor by Mr. W. C. Cullen, on an Inglis plate. The lens used was a Ross 6½ x 8½ Rapid Symmetrical, with ½ stop, a Prosch shutter being used in making the exposure.

Specimens of their recent work were shown by Dr. Jordan and Messrs. Reichner, Wood, and Redfield, which included views taken at Mount Desert, the Adirondacks; Virginia, etc.

Adjourned. ROBERT S. REDFIELD, Secretary.

ROCHESTER PHOTOGRAPHIC ASSOCIATION.—Regular meeting, June 30, 1884. President J. M. Fox in the Chair.

After the usual routine business, the following new members were elected: Rev. W. W. Walsh and Mr. J. H. Hoagland.

The motion to adjourn the meetings of the Society until the hot weather was over was lost.

The question of how to mount prints on cloth was then discussed.

Mr. Monroe stated that his plan was to lay the cloth upon a board or other level surface, tack the edges, and then proceed to mount the prints in the usual manner, using the paste cold, and having it first strained through muslin. To facilitate the mounting, the cloth should be first dampened.

Mr. Godfrey asked if it would not be well to paste the cloth also, before mounting the picture? Mr. Monroe said that he had tried that plan, but did not think it would always work satisfactorily.

Mr. Wardlaw suggested coating the board (upon which the print was laid to be pasted) with paraffine; by doing so no trouble would be had from the cloth adhering to the board.

Mr. Godfrey said that he had seen many excellent prints mounted upon cloth by the President, and would like to have him explain his method of working.

Mr. Fox: After trying many experiments in double mounting on muslin, I have adopted the following method: I prepare several yards of cloth at a time by sizing with starch, and always keep a roll of it on hand ready for use. While damp, the eloth is stretched, not too tightly, on a frame, and sized plentifully with warm starch paste, made rather thin, and spread on evenly. Where large quantities of muslin are used, perhaps tenter hooks might be employed to advantage for stretching. When dry, the cloth is cut to the size required before mounting, allowance being made for the expansion of the prints. If the starch for mounting is used while warm (which I think preferable), it should be as stiff as can be conveniently spread on the print, for the reason that it will expand the cloth less and dry quicker.

From the moment the first print touches the cloth, despatch is important, therefore both prints are first pasted, one being laid aside ready to be picked up quickly. The first print is rubbed down with a hand-roller, which can thus be done more expeditiously than with the hands. When the second print is properly laid on the opposite side there is less occasion for haste, and rubbing down by hand is preferable, because, although the roller does the work perfectly on the first print, mounted, it is liable to leave air-bubbles in rolling down the second one. To avoid bubbles in the hand-rubbing the strokes should be toward the right and left or up and down from the middle of the print, and not in every direction from the centre. When the mounting is completed the prints are put between papers and covered immediately with several folds of cloth of sufficient weight to keep them in place. To facilitate drying they may be aired after an hour or two and placed between dry papers and again covered with the cloth.

The question, Which is the best place for an instantaneous shutter, the front or back of a lens? was answered by Mr. Wardlaw; he said: The place for instantaneous shutters, in my opinion, is at the back of the lens; or better than either the back or front of the lens, is between the lenses, next the stops. The reason is, that the vibration which occurs more or less in all shutters will be less noticeable than if placed in front of a lens.

The question, How to produce cold tones on ready sensitized paper? was also answered by Mr. Wardlaw; he said: Several years ago I used ready sensitized paper; the greatest difficulty I had was from insufficient fuming, and, judging from prints on this paper which I have seen of late years, that still seems to be the principal fault in working it. It has been suggested to me that if after the first four washings the prints were made alkaline by immersing in a weak solution of sal soda the tone would be greatly improved, and I have seen a printing formula by one of our members (Mr. Learned) recommending the same treatment, only using borax instead of sal soda, but I still think that sufficient fuming before printing is the proper way to do.

During the discussion the subject of enamelling photographs was mentioned. Mr. Inglis recalled the fact that the glace finish, which was once popular, had now gone out of style.

Mr. Wardlaw said the reason it was no longer worked was that it required great care in the operation, resulting frequently in failure.

Mr. Inglis did not think so, the process he worked was not only simple but practical, and could be easily worked successfully.

Mr. Godfrey was of the opinion that the glace process was both difficult and expensive. He would like Mr. Inglis to explain his manner of working.

Mr. Inglis: A very simple and reliable plan of making the enamelled or glacé photographs is as follows:

A sheet of any smooth-surface glass (plate is best) is cleaned by any of the usual pho-

tographic methods, then rub over the plate a solution of alcohol containing about five drops of nitric acid to the ounce; rub over the glass and polish with a dry piece of Canton-flannel; finally, dust a little soapstone or French chalk from a small, muslincovered box containing the chalk; brush it off lightly with a clean piece of Canton flannel-be careful not to rub hard, as in that case the chalk would deaden the polish of the glass plate. This done, the glass is then coated with plain collodion-five grains of cotton to the ounce of equal parts of alcohol and ether. The plate is then allowed to dry, and can be kept in this state any reasonable length of time; when dry, lay the plate upon some level place and cover with a solution of plain gelatine about the consistency of cream, at a temperature of 90° or 100°. Allow the plate to lay flat until the gelatine sets, which will depend on the temperature of the room.

When dry, stand the plate (or plates) up to dry, and store them away. In this state they will keep indefinitely, and it is well to keep a stock on hand in this condition, as pictures can be mounted in a few moments.

To mount the pictures, lay one or more of these plates upon some level place over the sink, so that the water to be used will have free escape to the waste pipe. Cover the plates fully with water, allowing as much to remain upon the surface as possible, lift the pictures from the water they have been washed in, and lay them face down upon the prepared surface of the plate, filling it with as many prints as it will hold, arranging them according to their sizes. Pay no attention whatever to bubbles; have a piece of thin rubber cloth and a squegee. Lay the rubber cloth over the plates, and with the squegee press the pictures into contact with the glass, at the same time take out all air-bells by passing it back and forth over the plate.

This done, run around the edge of the plate with a knife to take off the gelatine and collodion for half an inch; this is to allow the paper that is mounted on the back of the picture to adhere to the glass, which will thus bind the whole thing down until liberated by being cut inside of this safety edge, otherwise, the pictures would be apt to

leave the glass before they are thoroughly dry, and thereby lose the brilliancy they would otherwise have if properly dried.

After the pictures have got surface dry, give them a coat of thin gelatine and cover them with a wet sheet of manilla paper, or any common paper of the same size as the plate. Then mount them with cardboard known as printers' board, because it is cheap and answers every purpose; finally, cover the whole with an enamelled sheet of paper of any tint desired, thus having an enamelled mount when the picture is finished as well as an enamelled photograph. After they are thoroughly dry, cut inside the safety edge, when the prints will come off with all the beautiful finish possible. The prints may now be stamped out with a round or square-cornered die, or cut with a knife any desired shape. The edges may be bevelled and bronzed with a little gumarabic and bronze, applied with a camel'shair brush.

The whole operation is simple and not nearly so complicated in its working as it appears from the description of how to do it.

The Secretary announced the receipt of The Times, The Philadelphia Photographer, The Bulletin, St. Louis Photographer, The Eye, and Photography, after which the meeting adjourned.

Another meeting of this Association was held on the evening of July 14.

"Why do some dry plates lose more strength in fixing than others?" asked a member.

Mr. Inglis: I suppose the question means different plates made by the same makers.

Mr. Lee: An undertimed plate will sometimes appear to the eye to be developed sufficiently, but when it is printed it will come out weak.

Mr. Inglis: I think in many cases the trouble is with the manipulator. In many cases the plate would develop quickly where there had been a short exposure, but would not have any density. It would appear to the eye to be developed sufficiently.

Mr. Mawdsley: I have met with plates which would develop superficially, and would not have proper strength. The

trouble is owing to some peculiar condition of the silver.

In reply to an inquiry by Mr. Lee, as to modifying the developer and continuing the process, Mr. Mawdsley said he would use a strong solution of hypo and restrain with bromide.

Mr. Inglis: I have found that a thickly coated plate requires longer time for fixing thanly a thinly coated plate.

Mr. Lee: The plates of some makers require longer to fix than others. There seems to be an objection among photographers to using a strong fixing solution.

Mr. Mawdsley: I don't see any objection to using a strong solution of hypo, I have seen it recommended that when a visible fixing has taken place, the plate should be allowed to remain a little longer.

Mr. Inglis: I have seen yellow soda spots caused by light fixing.

President Fox: Could the soda spots be caused by lack of washing?

Mr. Inglis: I think not. I do not know of anything which would cause them but imperfect fixing. I have seen plates that could not be fixed by leaving them in the solution an hour.

Mr. Mawdsley: Iodine calls for a stronger fixing solution than simple bromide.

Mr. Inglis: A strong solution will undoubtedly fix a plate quicker than a weak solution.

The second question was: "On which side does the bevel around the aperture of a stopgo? Towards or away from the plate?"

Mr. Inglis thought it made no difference. He had never paid any attention to the bevel in his practice. It was the general expression of the members that the bevel was more for ornament than anything else. Messrs Miller and Pomeroy thought that it might have some reference to the diffusion of the light.

The following questions were presented for discussion at the next meeting:

"Why does a lens illuminate a plate more in the centre than on the sides?"

"Does it pay to save washings, and what sthe best process?"

After some routine business the meeting djourned. W. J. LEE,

Association of Operative Photographers, 392 Bowery, New York, June 4, 1884. President Buehler in the Chair.

THE PHILADELPHIA PHOTOGRAPHER, Anthony's Bulletin, Photographic Times, British Journal, Photographic News, and the May number of Photography, were received with thanks.

Mr. Schaidner: The subject this evening was to have been on printing. I have seen several parties who promised to come and bring something to-night, but they have disappointed me, and we must do the best we can with what we have. There has been a great deal of talk lately about artistic printing, and I think that would be a good subject to start on. At Kurtz's they would take a dry-plate negative with weak shadows and cover the shadows with a little opaque. I would like to know if that is artistic printing?

Mr. Buehler: There is no doubt that the nature of dry plates is different from that of wet plates; the relations between the high lights and deep shadows are very different in the dry plate from those in the wet plate. I would like to know the opinion of some practical man in relation to the dry plate; it is a point of great interest, because operators are blamed for making their plates too intense, or the other way, and it is hard to hit the right way.

Mr. Atwood: In the matter of artistic printing, I do not know as it can be made a specialty; one must use his own judgment in the matter.

Mr. Buehler: Do you find that dry plates differ materially from the wet plates in regard to printing.

Mr. Atwood: Not in the least.

Mr. Schaidner: Mr. Hendrickson said that the artistic work of the future in the photographic gallery would be in the printing room.

Mr. Atwood: There can be no rule laid down, as a man must use his own judgment.

Mr. Buehler: It is true that a printer with taste can improve a negative, still, printing in itself, especially silver printing, is just the same as it was five or six years ago, and there is no prospect of material improvement.

Mr. Schaidner: There is a great differ-

Secretary.

ence in printing vignettes, and there is a good deal of art in that; there is a difference in a sharp one and a nicely divided one. Mr. Sprotle can tell us something about them.

Mr. Sprotle: In making a vignette when we have a weak negative, we use more tissue-paper, but it never makes a print like a good negative; if the silver is too strong it looks muddy. A good many people print a strong negative in the sun, and a weak one in the shade. We do just the reverse and get a good deal softer print.

Mr. Buehler: There is nothing new that I can understand. It rests with the printer to bring the negative by proper treatment up to beauty. It depends upon the man who made the negative, how he arranged his accessories. I have seen printing done from two or three negatives to make a group, and that I call art.

Mr. Mildenberger: Some years ago in reading one of the periodicals, I came across a letter from Mr. Lambert, in which he said silver printing was played out. A year or two after the dry plate came out, I found it was more difficult to make a good print with the first dry plates than with wet plates; they were not negatives, they were positives. In printing from a weak negative use a stronger bath than for a strong negative; fume the paper more for a strong negative than for a weak one. In Germany very few fume the paper, but they use a stronger bath, from 60° to 70°, and silver from four to five minutes; a weak negative treated in this way makes a better print than with paper silvered in a weak bath and fumed for half an hour.

Mr. Buehler: Do you find more difficulty in using the dry plate than the wet?

Mr. Mildenberger: A good dry plate will make as good a print as a wet plate.

Mr. Acker: When I made a vignette the other day, I had to place the frame in a certain position to get it straight. Mr. Sprotle can place them any way and get them straight.

Mr. Buehler: It is supposed that dryplate work is up to the standard of wet plates, and if it is not so now, it will be in the near future; it is hardly possible, considering a man has to print one hundred negatives in a day, that he can bestow the same attention on every one of them; he is compelled to rush out a certain number of them every day, and that prohibits many men from bestowing much time on each one.

Mr. Acker: I think part of the artistic printing Mr. Buehler referred to, bringing in back-grounds and groups, will decrease; it is done more or less in the small galleries where they do not have the back-grounds. In large galleries such a case seldom occurred, they have the back-grounds for every scene they wish, and their instruments are much better.

Mr. Schaidner: A short time ago Mr. Coonley read a paper before the American Institute, on "Art in Connection with Photography," but he did not say how to print.

Mr. Mildenberger: Some time ago I had to make a print from a 14×17 negative of a lady; there was a deep yellow stain in the middle of the plate; we took another negative of the back-ground, and printed that part of the original negative from the second negative, so that the print was made from two negatives. One was not so intense as the other, and there was a slight difference in tone, but you could not point out the lines.

Mr. Buehler: Does anyone know how Moreno makes those cloudy back-grounds?

Mr. Atwood: I understand he has tinted glass, I don't know how large, of which the centre is clear; the clouds are painted by Seavey on this glass; the subject is behind the glass.

Mr. Mildenberger: Some time ago I had to take a view in Philadelphia; the room I was in had a very large window which moved on a pivot. I had to set the camera behind the window and take the view through the glass.

Mr. Buehler: If the glass is good it does no harm to take the picture through the closed window; it has a softening effect on the picture and does not show the grain of the paper so much.

Mr. Schaidner: In many cases when copying prints on albumen-paper, if they are put behind a glass they will take much better.

FRILLING OF GELATINE PLATES AND OTHER MATTERS.

BY RANALD DOUGLAS.

FRILLING is a name commonly given to a very peculiar behavior of gelatine plates, though it is sometimes to be met with in collodion. Many photographers may not have had this trouble; such, very probably, have no idea what frilling is. It will be recognized when some plates on being wet with solutions commence to blister (like albumen paper) in one part, extending to others, then the film expands, small wrinkles running about in all directions; finally, the whole film detaches itself from the glass.

On my own part, when I used commercial plates I never saw frilling, though I often had defects in other forms. Since making my own plates for the last year I have had the good luck (?) to meet it and study it as well as I could. It is only in summer that the trouble comes to me. I have traced the cause to this origin, and have come to this conclusion, that they are solely due to excessive temperature of the weather, or the atmosphere of the coating-room, or the emulsion being too hot while coating.

Also, if the second portion of gelatine (which should not be more than necessary for its dissolution) be too hot when the boiled portion is mixed with it, frilling is almost certain to result. We will suppose you use good gelatine only. I use Swiss, and find it very reliable. In summer, I would advise that the coating be done early in the morning, before sunrise. The glass must be slightly warm; or perhaps better, to be exact, the temperature of the emulsion, say 100° F., or as near that as possible.

Now suppose frilling occurs, some advise alum as a remedy. I have found alum a very poor help at best. I have lately had a valuable negative frill after fixing, and for a while the total destruction of the negative was threatened. Alum would not save it. I was in a quandry for a few minutes, when i bright idea occurred to me. I flowed over the plate several times with strong alcohol, and dried it rapidly. The blistering settled irm, and allowed the plate to be afterwards vashed and strengthened. I have since ex-

perimented with the batch to find out the best remedy in case the plates would frill. The best way I have yet found is this:

Before developing, run a stick of paraffine round the edges. This keeps water from getting under the film. After developing, rinse a little, and immerse in the alum bath for a few minutes, say five or ten, then rinse again and allow it to dry; or better, hasten its drying by alcohol. After it is once dry it can be again washed, fixed, and intensified without the blisters or frill reappearing.

I have made a good many plates for my own use, and when the above precautions in making the plates are adhered to, frilling never occurs.

For a reliable formula, I can strongly recommend that given by Mr. H. W. Menke in this year's Mosaics. I use the same, with this difference, I add fifteen to twenty-five grains of iodide of potassium, which not only helps to keep shadows clear, but also allows longer boiling. iodide is used, blurring in landscapes is entirely done away with. The sensitiveness is the same as though no iodide is used. The only disadvantage with iodide is that it takes longer to fix. Under no circumstances would I use emulsion fresh. Like collodion, it works best after it is a little old; from three to six days' ripening improves it greatly. A little carbolic acid, say ten to twenty drops, and one ounce of alcohol added to every twenty ounces of emulsion, will make it keep indefinitely.

THE NEW PHOTO-LABORATORY CONNECTED WITH THE TECHNICAL HIGH SCHOOL IN BERLIN.

For many years the space accorded to the Technical High School in this city had been found entirely inadequate for the improvements and advances of recent times. After the necessary delay in negotiation had been overcome, a magnificent structure began to exhibit the framework of its future grandeur. Scarce ten years have flown, and the work has reached its completion—a building which in proportions exceeds the royal castle at Berlin.

Adjoining this structure are clustered the

various laboratories belonging to the institution—the chemical, technological, metallurgical, and photographic. It is to this last one that I wish specially to call your attention.

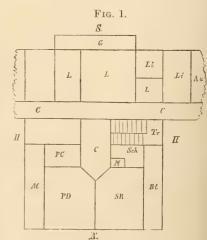
Hitherto the part played by photography in the curriculum of studies was that of Cinderella. Very contracted were the quarters to which, in the old high school, she had been confined. Some latitude, it will be confessed, was allowed to the atelier, but the rest of the space allotted made her indeed "cabined, cribbed, confined." It was hardly possible for four persons to move comfortably around in the dark-room, but when eight individuals, per necessitas, were obliged to crowd themselves within this confine, it was almost insufferable.

To add to the discomforts of the situation, the roof was covered with zinc, and as the ceiling was only about eight feet from the ground, you may fancy that we had an elysium to work in during the hot days. The want of ventilation had never entered the consciousness of those who had constructed this pandemonium. Now, imagine, I was compelled daily to share this pent-up hole with my scholars. A retreat wherein I might pursue my labors uninterrupted I had not. With patience had I endured this for twenty years. Now, add to this a corresponding modesty in the means allotted to me for carrying on experiments, and you will not envy me in the enjoyment of the same.

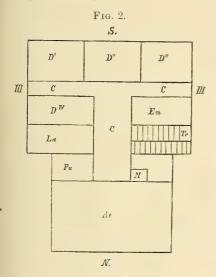
My Great Discovery.

The discovery of the sensitiveness of films to red and yellow light, so much discussed at present, I made here with a borrowed spectroscope. But, as with Aladdin's magic lamp, all this has disappeared, and in its place, ease, comfort, convenience, and beauty. Thanks to the generosity of the Council that all this has been effected, which compensates for the defects of the old building.

I can give a sketch of a part only of the new building, one side of which is devoted to spectrum analysis, and the other to photography, both of which are provinces of my field of lectures. We have an abundance of light, being situated in an open space in a park called the Hippodrome. The location likewise affords the low temperature necessary. Moreover, the engine-house has a five-horse power gas-machine driving a Siemen & Halske light-machine capable of supplying six arc lamps, each of twelve hundred candle-power. Wire leads from this to the atelier in the third story, where the lamps are made to give the combined effect of seventy-two hundred candles, so that we are entirely independent of time of day or season of the year. A broad, easily mounted stairway (see Figs. 1 and 2, Tr) leads to the upper story, where we find upon a corridor c c, a multitude of places devoted to special operations. Along this corridor are hung photographs of technical, artistic, scientific, and historical subjects, as well as beautiful landscapes-examples of the old as well as the new method. These are the results of my collection during twenty years' sojourn in the institution. pictures have therefore become a permanent exposition and a constant source of pleasure and instruction. The adjoining space (Fig. 1) is devoted to the positive process.



The spaces P D, P C, S R, are for silverprinting, pigment printing, platinum and carbon printing. A glazed platform, Al, towards the east, and one not glazed, Bl, towards the west, are for exposing the copies to the light, the dark spaces P C and P D for preparing and washing, and space S R for retouching, mounting, and finishing. Upon the other side lie the bureau and operating-rooms of the teachers, L L L, and the room for Lichtdruck, Li Li. The auditorium adjoins this, Au. Another room for enlargements (so-called microphotography) lies more westerly—not seen in the sketch. This is also for relief and depression processes (phototypes, autotypes, heliotypes, heliogravures, etc.).



The room devoted to the negative process (see Fig. 2) is immediately above. An elevator, M, is intended for carrying heavy apparatus upstairs.

Upon this floor you are conducted into the glass-house or skylight, At, thirty-five feet long and twenty-two feet deep. Room sufficient for all purposes; the front lying directly towards the north. The dressingrooms adjoin, Pu. La laboratory, and Di D'''', dark-rooms.

D'''' serves specially for the wet process. It was the intention to have this nearer the atelier, but changes in the plan necessitated its removal to its present situation.

The dark-rooms D' D'' D''' are for dryplate work. This branch requiring several special dark-rooms for digestion, cooling, drying, etc. Besides these there are several other rooms intended for those interested in any special work or investigation.

These rooms are indispensable, and the number has greatly increased of those

students of art and science who, having enjoyed the privilege of the Technical High School, are now desirous of increasing their knowledge by personal investigation, and it is apparent that with the increased facilities, the number will be increased still more.

The rooms, one and all, are well supplied with hot and cold water, and excellently ventilated, and with the exception of the dark-rooms, are lighted with Edison's glow-light.

The elegance of the furnishing and fitting up of these rooms, as well as the photochemical auditorium (Au, Fig. 1), the spectroscopic laboratory, and the photometric room, make the whole an object worthy of the admiration of all photographers who visit Berlin.

Want of space prohibits further enlarging upon its excellences. At another time we shall enter more in detail. What has been said will, however, satisfy the reader that in Berlin an institution has been founded that is of the greatest importance, both artistically and scientifically, to the photographer.

PHOSPHORESCENT PHOTO-GRAPHS.

A good deal of inquiry has been made of us lately as to what phosphorescent photographs are and how to make them. Phosphorescent photographs result from the property possessed by certain metallic sulphides and other phosphorescent objects of absorbing light when exposed to its influence, and giving out the same when brought into a dark room. One of the most striking effects consists in spreading a sulphide upon a flat tablet and exposing it to a strong light for a few seconds under an ordinary photographic negative. When the tablet thus impressed is taken into a dark room and the negative removed, the picture on it will be found glowing in quite a mysterious and wonderful manner and will continue for some time to radiate the light which it absorbed. Mr. A. S. Henderson, a gentleman whose name is well known as a genius and photographic experimentalist, has suggested the mixing of one of the most sensi-

tive of these phosphorescent sulphides with the bromide of silver, now so generally employed in the preparation of photographic dry plates, and after emulsifying this mixture with gelatine, spreading it upon the surface of glass plates and exposing them for a moment only, thus securing very pretty results. The light falls upon the atoms of phosphorescent powder incorporated in the films, and as these in turn radiate such light, it follows that it will complete a perfect exposure settled in the bromide by the direct action. The plates thus prepared have such exceeding sentitiveness as to be impressed by what Mr. Henderson calls "the flash of a match." Phosphorescent sulphides may be found at chemical laboratories or may easily be prepared by heating the carbonate of lime, of baryta, of strontia, or other carbonate found most suitable, in a covered crucible with half its weight of After an hour's exposure to sulphur. heat, the preparation is complete. substance obtained being briefly exposed to light, is then withdrawn to a dark room when it will be seen to glow brightly. The color of the light emitted depends upon the kind of carbonate originally selected. This is about as far as the matter has been developed, but we hope something will be done to advance it further, and shall be glad to hear of the experiments of any of our readers in this direction.

PHOTOGRAPHY ABROAD.

THE manufacturers of cherry fabric have given to the trade another substance, which they have called golden fabric on account of its color. This was made by Messrs. Law & Co, on the recommendation of Mr. Zachensdorff, the photographer, who spoke of it in the most enthusiastic manner at the London Photographic Club. This article, it is said, is well adapted for the windows of the photographic laboratory; it allows the passage of the light-golden rays, which exercise no action on the plate and do not seem to fatigue the eyes of the operator. The body of this new color seems to be derived from naphthaline, probably the trinitronaphthal already known under the name of Martin's yellow.

Mr. Stebbing has made an interesting use of his sensitive pellicles for obtaining counter-types by contact from a chloride of silver positive. A positive photograph, the clické of which has been injured, may be used directly to form a new negative. The sensitive negative, being flexible, may be pressed as strongly as desired against the positive used as the cliché in the pressure-frame, and the result of this very close contact is a counter-print sufficiently perfect to be favorably compared with the original negative, We have here a very useful application and the specimens shown by Mr. Stebbing are a proof of it.

The English journals of chemistry describe the process adopted by M. Borowski for the manufacture of yellow amber varnish, which is generally considered the best of all varnishes, and the one used, it is said, by the famous violin-makers of Cremona to varnish their violins (this, however, has never been proved), and which is now buried in the tombs of the Amati, Stradivarius, etc. In this process the amber, melted and mixed with the oil, is diluted with a considerable quantity of turpentine, and then the whole is set aside for several weeks. At the end of this time the impurities are found at the bottom of the vessel, and the clear liquid may then be withdrawn by means of a siphon. This clear liquid is placed in a distilling apparatus in which the excess of the solvent is eliminated by means of a current of air passing through the liquid, which thus acquires the density of a syrup. Before using, it should be diluted with a sufficient quantity of turpentine. The apparatus in question consists of a series of perforated plates through which the air is driven; it is heated by means of a steam-box, which envelops the whole; the varnish enters at tile top and comes out at the bottom of the apparatus. The vapors given out, together with the air, escape by an opening at the

A skilful chemist, Mr. M. Zingler, has given the description of an artificial product suitable to take the place of gutta-percha in photography, as well as for the other purposes to which it is put. In an enamelled pot, furnished with an agitator, are placed 50 kilogrammes of pulverized copal, 7.5 to

15 of flowers of sulphur, and from 15 to 30 of essence of turpentine, or, instead of this last, from 50 to 60 litres of petroleum. whole is heated to from 120° to 150° C., until complete solution, and then cooled down to 38° C. On the other hand, 3 kilogrammes of caseine are emulsionized with the aid of a weak solution of ammonia, to which is added a little alcohol or woodspirit. These two solutions are mixed, and heated a second time from 120° to 150° C., and until a thin syrupy consistence is obtained. This is now heated with an extract of tannin (15 to 25 per cent.), obtained from nut-galls, or with caoutchouc to which about half a kilogramme of ammonia has been added. After cooking for several hours, the product is worked up in cold water, then in warm water, passed through rollers, made into rolls, and dried.

The purification of shellac has always presented great difficulties, but it appears that the new process of M. Andès will cause them to disappear. Our journals of chemistry say that this process consists in taking 3 pounds of soda dissolved in 45 quarts of water to which 11 pounds of crude shellac have been gradually added. A violet liquor is obtained, which is boiled for a few minutes, and when it is still hot the vessel is hermetically closed. When cold the cover is raised and the grease which has accumulated on the top of the liquid removed; this last is passed through a cloth, and the filtered liquid is decomposed by means of diluted sulphuric acid. The purified shellac which is precipitated is washed in cold water, submitted to pressure, and finally melted in hot water, giving it thus the desired forms. The product is completely soluble in alcohol. -Dr. Phipson, in Paris Moniteur.

GLEANINGS.

At the last meeting of the French Photographic Society, M. Davanne, in the name of M. Cheysson, Director of the Bureau of Plans and Maps of the Public Works, described a process of "Photo-transfer," which may be summed up as follows: The silver print upon salted and albuminized paper, on which the transfer is to be made, is used to receive directly the drawing upon

it, following the lines or outlines which are to be preserved. They are traced with a pencil, or with an ink of a nature to resist the ulterior baths and washings. This being done, the print is immersed in bichloride of copper, which converts the silver of the image into a chloride of silver. The image whitens and disappears, and the lines made by the pencil remain alone visible upon the surface of the paper. Nothing now remains to be done but to remove the chloride of silver by means of a bath of hyposulphite of soda, then to wash, so as to remove all trace of the fixing bath.

If it is desired to make a photo-transfer to be used on a lithographic stone or on zinc, a fatty autographic ink is used, and the drawing is transferred to stone or zinc, the operation being proceeded with in the same manner as for ordinary lithographic prints. In his case, it is useless to remove the photographic image.

If the drawing is to be used for making polychromic impressions, it is transferred on a number of stones equal to the number of colors to be used, and on each of these, proceeding by elimination, those parts alone are preserved which are to furnish their share of color.

Mr. Balagny gives his formula for toning as follows: Place one gramme of chloride of gold in one litre of distilled water. In another vessel, dissolve thirty grammes of borax in a litre of boiling water. After reposing, add two hundred grammes of this solution to the preceding one, the whole being heated to a temperature of 70° to 80° centigrade. The dish is now removed from the heat, and the prints plunged into it, placed back to back—the image on the outside—and allowed to remain from thirty to forty seconds, at the most. They are then fixed in hyposulphite of soda, to which one or two per cent. of ammonia has been added.—Paris Moniteur.

DEVELOPMENT OF OVER-EXPOSED PLATES.

—Mr. Scolik, whilst experimenting with the process indicated by Mr. Sautter, of Geneva, to utilize over-exposed plates, has obtained very remarkable results. In the conditions in which he worked, an exposure of three

seconds gave, with the iron developer, a perfect cliché. He increased the time of exposure to two minutes; in developing in the usual manner, he now hardly obtained any image; but by plunging the plate for a minute and a half in a bath of bromide of potassium, at ten per cent., removing without washing, and developing it in a bath of ordinary oxalate, to which six drops of a solution of citric acid at fifty per cent. had been added, he obtained an almost perfect cliché.—Phot. Corresp.

At the meeting of the Amateur Society of Liverpool, Mr. Svatts read a learned paper on the development of instantaneous plates. The author made use of pyrogallic acid, bromide of potassium, and a few drops of ammonia, and varies the proportions according as the plate has been too much or too little exposed, as with instantaneous plates these two effects may take place between the limits of the commencement and the end of a second. The average formula for a quarter-plate is: three grains of pyrogallic acid, one grain of bromide of potassium, and two drops of ammonia.

At the same meeting, Mr. Roberts showed a negative which he had developed with a bath of which he speaks with enthusiasm:

Ordinary Carbonate of Soda, 30 grammes.

Bromide of Potassium, 0.2 "

Pyrogallic Acid, 0.6 "

Water, 300 c.c.

According to the account of the committee, which has just been published, the subscriptions for the Daguerre monument amount to 8120 francs. The inauguration of the monument took place on August 26, 1883, at Carmeilles-en-Parisis, the birth-place of Daguerre. The workmen gave their time without charge, and, owing to this, the committee was enabled to produce a monument worthy of the man.—Dr. Phipson, in Paris Moniteur.

The application of photography to painting has just undergone a curious modification. When we reproduce on canvas from the photographic negative an enlargement of the subject to be painted, we obtain the

image in black lines, difficult to modify or obliterate, if so desired, and which cannot always be made to disappear by means of the color applied. Painters use, ordinarily, charcoal for their sketches, and the lines traced by this substance are easily removed. To-day, instead of making an enlarged print on the canvas prepared to receive it, it is only necessary to project on the unprepared canvas an enlarged image of the negative, the outlines of which are traced by the artist. It is easy to conceive that in this manner photography may be very useful to the painter, whilst it leaves him a latitude for the development of his poetical ideas.

LIGHTNING WORK ALL THROUGH.

INSTANTANEOUS PHOTOGRAPHY AS THE TERM IS UNDERSTOOD IN THE CONEY ISLAND STUDIOS.

"You may talk about your instantaneous photography," observed a man who produces tin-types for the masses at Coney Island, "but if you want to see lightning work all the way through you should look in here some day when it isn't raining. The instantaneous process is quick work only for an instant. This is something that requires lightning speed from the instant the subject darkens the door to the moment of handing him back his change. How will he have it, standing or sitting?—all right, take this seat—sit still—now look pleasant—there you are—twice as natural as life—half a dollar—thank you sir—next!

"Posing? Well, no; we don't do much artistic posing. There are only two poses known and recognized by us—the standing and the sitting. But there are variations—and such variations! However, our customers attend to those, and we don't trouble ourselves. The main thing is to get the subject still for a moment. You can't satisfy anybody with a picture in which he appears as a group; you must have him still, and when you have got him there your trouble ends. A good and artistic pose with us is one that doesn't change while the lens is uncovered.

"You would think posing would be an easy matter here, wouldn't you? Suppose you should have half a dozen fellows, full as goats, come in and insist upon being taken in a group, what would you do? Give it up! Well, we don't; we just take 'em. They can't count, and if some of them appear two or three times in the picture it doesn't matter. So you would be right in thinking posing an easy matter. The solicitude of the young man and his best girl from the country to appear to the best advantage on tin, might give us trouble but for our long experience. We don't give them any preliminary voice in the matter. The young man is at once seated, and warned not to stir. Then the girl is stood up just back of his right shoulder, and her left arm is brought across the back of his neck so that her hand rests on the left lapel of his linen duster. Then we have got him; he doesn't want to stir. The girl never makes any fuss. These things have to be done you see. The populace is waiting to be tintyped, and there is no time for experimenting as to postures and points of view.

"But after all, the principal thing is to have the background what it should be If the portraits don't resemble the original it's of little consequence. The friends of the subjects will believe them when they say the pictures are theirs. If any further evidence should be needed, we' would cheerfully certify that they had paid for them. But the background must be appropriate—an angry sea lashing a picturesque wreck; a still expanse of water with a glimmer of light coming down from the moon on the horizon; a boat left high and dry by the receding tide; or something of that sort. Of course, these things are painted in the city, and could be used there as well as here. Perhaps the negatives and the finishing could be done as well in the city as at Coney Island; it don't want a drawing-room background. It wants the marinest kind of marine surroundings, and shall have them, if enterprise on our part can furnish them."

WILSON'S *Photographics* is the most complete and thorough photo-instruction book ever published. It has passed through several editions in the last few years.

HUMORS OF THE ARCTIC.

HOW THE EXPLORERS CONTRIBUTED TO EACH OTHER'S AMUSEMENT AT THE FORT.

Sergeant Rice's diary abounds in evidences of the attempt of the members of the Greely party to enliven each other's spirits during the long periods of desolation at Fort Conger. To judge from his notes and suggestions Sergeant Rice was himself no small contributor to the general amusement. They had a paper, which they printed on the polygraph, called The Arctic Moon, and some articles intended for it are found in the diary. Sergeant Rice also translated a French romance for the benefit of his comrades, their increasing interest being evidenced by the decreasing length of the chapters, and the great condensation of the latter part, so anxious were they to reach the denouement quickly. Speeches and lectures appear to have formed part of their amusement. In one place Sergeant Rice has the following "suggestions for an (attempted) humorous sketch: "

"A WORD FOR PHOTOGRAPHERS."

"Suppose the photographing of a baby, which has been given to a couple whose motto for years has been 'hope.' Describe said babe a beautiful, innocent, dew-eyed darling-the preparation of the baby for the photographer's manipulation. The babe is gorged by the mother as the Bedouin would a camel before starting on a desert journey, so that it would be quiet and con-Results in the babe's indigestion. Then the attending troop of relatives. The photographer must await the arrival of some one who is said to charm the babe. Baby gets tired, but must be photographed smiling. He must vouchsafe a smile of benevolence, while in heart he desires to out-Herod Herod.

"The next subject is the beauty—or the faded beauty—who is, as are also her friends, dissatisfied with the photograph of her in the sere and yellow. Or the young-old lady, who resembles Mary Anderson or Adelaide Neilson. Or the ignorant lady, who will not tolerate a shadow under her chin. Or the General with the battle scar, which his patriotic wife worships.

"Suggestions from cartes-de-visite? The social equality of the arrangement of photographs in a shop window—Henry Ward Beecher cheek by jowl with Pat Rooney.

"It is easy to recognize a photographer (unless he makes all his pictures by chance) by the manner in which the subject is posed, and the arrangement of the light. A photographer has negatives in number equal to the population of a country town. Quote the criticism on Walter North's garden scene. The sense of beauty, and best momentary pose of the body is a gift which cannot be picked up as a mechanical art can be. Instance among difficult subjects, the fat woman-' like heavenly pastures, large and fair.' The trials of the jail photographer, the 'Bashful Sitter.' Custom House officers and dry plate. Speaking of troubles of photographing nature, writer might mention experience with a seal in the Arctic."

INTENSIFIER FOR GELATINE PLATES.

BY H. W. VOGEL.

GELATINE plates recommended themselves at once to the photographer by their high degree of sensitiveness over collodion plutes, but experience found that they had some drawbacks—that it was not all plain sailing with them.

One of the rough seas was their intensification. The strengthening of a collodion plate is more child's play, but it requires all the patience of a Saint to strengthen a weak gelatine plate.

Pyrogallate of silver, mercury, platinum, uranium, and a host of others act like a charm upon collodion plates, but have no effect upon gelatine.

This trouble with gelatine plates has led many operators to come to the conclusion that it is better not to tinker with them, but to let them alone.

Full of this conviction many platemakers have sought every method to make these plates so that they shall demand no further strengthening, that they shall give at once crisp, clear, and intense negatives. But here again, the wind of trouble blows from another quarter. In bad weather these

original strong negatives are hard to print from, require almost a day to get one impression, and as customers are clamorous, and want their pictures almost as soon as the camera is pointed at them—telling you that the new processes are instantaneous, you are anxious to get as many impressions as possible.

We have found out the reason why intensifiers act so tardily on gelatine plates. The chemicals employed acting directly upon the gelatine film form with it combinations which render it impenetrable to the further action. This is not the case with collodion. The collodion film is rather indifferent to the chemical action. Hence the ease with which the various intensifiers act. Eder has recently found out that not merely the red prussiate of potassa, but also uranium act as tanning agents. The film is hardened, and the way to the action of the intensifier blockaded to the interior. Hence, it is clear that the same intensifier cannot be used for both.

In five minutes, at the most, a collodion plate is intensified; a half hour is frequently consumed before any strength in a gelatine plate is manifest. A proof how difficult it is for the chemicals to force their way through the tough, leathery gelatine film.

It, therefore, follows that those intensifiers will be found the best for gelatine plates, whose action is least upon the film in converting it to a leathery consistency; those which penetrate easiest and are easiest eliminated.

As far as our present knowledge extends, the mercury intensifiers answer the demands best. Now mercury has been recommended in various forms, but I prefer the bichloride of mercury and ammonia, or Edward's intensifier, or Eder's bichloride of mercury, iodine, and cyanide of potassium intensifier.

The latter is excellent, but does not keep well, hence requires to be made fresh every time.

Edward's intensifier, on the other hand, keeps well, but gradually decomposes as Eder has shown; but I have heard practical men complain of Edward's developer, saying that with time the negative becomes yellow, but the bichloride of mercury and

ammonia does not act injuriously. This is favorable to the use of the latter, but I can add my word in approval to it. Some will object that this too acts ruinously upon the negative, but the fault is that the negatives are not sufficiently washed after using it. Remember the necessity of thorough washing is insisted upon. The want of washing is the cause of the ruin. Wash immediately before treating with the intensifier, and after.

Every trace of hypo must be got out before a drop of mercury is put upon the plate, and after it is intensified wash it for half an hour to get rid of every minute portion of mercury. If you proceed in this way, you will never have to complain of spoiled negatives.

ISOCHROMATIC GELATINE PLATES.

BY DR. O. H. LOHSE, Potsdam, Germany.

In the course of my experiments concerning the modification of the sensitiveness of bromide of silver by the action of colored bodies, I have made use of the following: orthonitrophenol, orthonilsaniline, paranthaniline, metanitranilin, quercitrin, thymochinon, aloe diamidoazoenzoe, phospni aurantia, and numerous others.

These bodies were without exception treated in the same manner, as I have already described in the application of eosine, 0.02 gr. of coloring matter dissolved in 100 c.cm. of water, with ten per cent. of ammonia, and filtered. When necessary the coloring material was first dissolved in a little absolute alcohol before adding it to the water. I made use of the extra rapid plates of Nelson, of London, which I bathed for two minutes in the solution and then dried.

Without going into details, it will suffice to say that of the twenty-six bodies I made use of, two proved more active than the rest in the operation. There names are diamidoazobenzol hydrochloratum and chrysanilinenitrum. The former increased the sensitiveness of the bromide for yellow and green very considerable, so that in pho-

tographing the sun spectra, a second maximum of effect takes place in the space lying between the Fraunhofer lines D and b. In the vicinity of F towards G, there was a spot of less activity, similar to that manifested by eosine.

Chysanilinenitrieum increased, in connection with ammonia, the sensitiveness of the bromide of silver in general, and also the sensitiveness to color. The photograph of the spectra extended upon the plate with normal exposure of twenty-five seconds to the ultra violet, and on the other side beyond D.

The effect was more rapid when the solutions were purer. I prepared a solution containing 0.004 gr. of chrysanilinenitrium and 2 c.cm. of ammonia, to 100 c.cm. of water, and exposed a plate prepared therewith, and, at the same time, another plate unprepared. The chrysaniline plate was considerably more sensitive, going to No. 9 of the scale, while the unprepared plate only registered 4.

PHOTOGRAPHED WHILE KISSING.

A CORRESPONDENT informs us of a romantic incident which has recently occurred in a prosperous London suburb. A devoted young High Church curate of interesting appearance, and great popularity in his district, was waited upon by a young lady of considerable attractions, but with an air of deep melancholy, and clad in a somewhat ascetic garb. After some confusion and the shedding of a tear, she revealed to him that she had ventured to visit him on a matter deeply affecting her happiness, she feared her life. The curate naturally asked what it might be, but after several attempts to speak, choked by sobs, she informed him that the matter was one of such deep importance that she could not impart it except at her own abode, where she adjured him as her spiritual friend, by all he held sacred, to visit her. After some little conversation the reverend gentleman promised to do so, and the next day he called at the address given him. Then the young lady, with a look of still deeper dejection and a voice indicative of remorse and shame, revealed to him the fatal secret. She had conceived a deep, a passionate love for the curate himself. She knew, she said, that her passion was hopeless; he in his devotion to the Church, for which she loved him all the more, had vowed himself to a life of celibacy, and she would resignedly carry her attachment to the grave, which she felt was not far off. But there was one kindness which it was in his power to grant her, the remembrance of which would bring consolation to her dark and dreary path. Would he, before they parted forever, give her one kiss? After some timidity and agitation the young curate, touched with pity, complied. The lady shed another tear, bade him adieu in a hollow voice, and he departed. A few days afterward he received a neat little parcel gracefully tied with a piece of blue ribbon, and on opening it found an instantaneous photograph (cabinet size) of himself kissing the young lady. Accompanying this was a communication from the fair creature herself that there were eleven more copies, and that he might have the whole dozen at £20 a piece. Should he not be in want of them it was her intention to dispose of them in another quarter. Negotiations on the subject are said to be proceeding.

PHOTOGLYPTIE.

A CORRESPONDENT sends us the following notice of an art for the reproduction of photographs, which he has written after a visit to the atelier of M. Goupil, at the village of Asnières, near Paris. Any one who has seen the marvellous reproduction of Curtois's oil painting of a young lady with flowing hair and a gauze scarf leaning against a moorish lattice, which is now for sale in Bond Street, will be interested to learn how so wonderful a result is produced.

M. Goupil's establishment at Asnières is close to the station, and consists of two villas thrown together, shut off from the street by a high white wall, and with gardens--formerly, no doubt, tidy and productive, but now given over to chemistry—which intervene between the houses and the

river Seine. Many processes are here carried on, some of them in the profoundest secrecy. Of what I saw, as a very unskilled observer, that which most appealed to my imagination was the process of "photoglyptie," the object of which is to multiply photographs with cheapness and rapidity, and to render the impressions not only true and delicate, but also permanent. subject that was being treated at the time of my visit was one of those substantial ladies whose smiling faces and décolleté costumes adorn the windows of the Rue de Rivoli, probably a singer or an actress. Her portrait, which was of the usual cabinet size, had been previously treated by some photographic method, which had resulted in the formation of a thin pellicle, as it is technically termed, of pure and transparent gelatine not much thicker than a piece of note-paper, and of the exact size of the original photograph. Figured upon this delicate transparency (when held to the light it reminded me of the pictures which are sometimes seen in glass lampshades) was the exact image of the original picture. This pellicle was next laid upon a slab of lead about half an inch thick, and subjected to heavy pressure in a hydraulic press. When one looked at the leaden slab and considered the enormous pressure, amounting to one thousand pounds to a quarter of an inch, to which it was subjected, it might have been reasonably imagined that the frail pellicle of transparent gelatine would have been crushed out of existence. But, no; it is, on the contrary, the lead which gives way, and the result is that, on pressure being removed, it is found that the plate of lead has received on its compressed and hardened surface an image of the décolleté lady precisely similar to that which had been originally transferred from the photograph to the pellicle. The rest of the process is in appearance simple enough. The leaden plates (it is possible to obtain several from one pellicle) are smeared with thick ink, and the copies are printed off half a dozen at a time, which are subsequently mounted and sold at prices far more moderate than could be allowed by any process of ordinary photography at present in

Editor's Table.

PICTURES RECEIVED.—We are again in possession of a number of views representing marine scenery, the gift of Dr. S. C. PASSAVANT, of San Francisco, Cal. In richness of quality, in vigor and brilliancy of effect, in softness, in the gradations of light and shade, combined with delicacy of detail, it seems impossible to go beyond. Add to this, the charm of a true artistic conception in the graceful grouping of the various objects upon the surface of the sea, and the transparency and mobile representation of the water giving the actual idea of motion, and we have pictures true and pleasing from their realistic beauty.

Good instantaneous views are too often the result of a happy chance-one in a thousand-but when we are presented with a number of such views, each having its individual excellences to recommend it to an artistic taste, and among which it seems difficult to determine which deserves the highest praise, we are convinced that the photographer who made them did not point his camera at random, trusting to a happy fate to impress a fair image on his plate, but calmly and deliberately selected that moment of time, and that portion of space, when the scene appeared to his eye the most beautiful. They are, therefore, the transcript of his own feelings. Actual in nature, not ideal, but only perceived by an artistic eye.

We are ready to exclaim with the poet:

"Praised be the art whose subtle power could stay
You cloud and fix it in that graceful shape,
Nor could permit the thin smoke to escape,

Nor those bright sunbeams to forsake the day.

And showed the bark upon the glassy flood,
Forever anchored in the sheltering bay.
Soul-soothing art! which morning, noontide,
even.

Do serve with all their changeable pageantry.

Thou with ambition modest yet sublime.

Here for the sight of mortal man has given To one brief moment caught from fleeting time, The appropriate calm of blest eternity."

We are glad to give the name of the gentleman who took these views, Mr. W. H. Lowden,

an amateur. The plates were exposed on the 4th of July last, and developed according to Dr. Passavant's formula for carbonate of potassa and pyro developer, published some time ago. The lense used was a Darlot No. 3, and had to be stopped down considerably to cover the $6\frac{1}{2} \times 8\frac{1}{2}$ plate used. An evidence of the extreme rapidity of the Passavant plate. Contrary to the rules laid down in the books, some of the views were taken directly against the sun, giving a beautiful effect.

We have not seen the negatives, but judging from the prints which were taken directly from from them, we can say that they testify to a brilliancy and clearness in the plates, with a beautiful modulation of tone and an evenness in the working which justify the reputation these plates have upon the Pacific coast.

We are glad to know that Dr. Passavant has bought the flourishing dry-plate works of the Taber Manufacturing Company, of San Francisco. It is unnecessary for us to wish him success in his enterprise. Good plates, like good wine, need no bush.

MR. WILFRED A. FRENCH, of Messrs. Benja-MIN FRENCH & Co., has sent us a 5 x 8 photo of the Cincinnati Convention, remarkable for the excellent detail. There is not a blur in any part of the picture, not even upon the extreme edge. Every face in that vast multitude of knights of the camera can be recognized. The print is excellent, being made upon KRUPP & Munch's paper by the Norman Photographic COMPANY. It was made with Mr. FRENCH's pet lens, and, we might add, everybody's pet, the celebrated Euryscope (No. 2), small stop, onequarter second exposure-cloudy day - on CRAMER'S "Lightning Gelatine Plate." It is without doubt the best picture of the Convention, and we are glad that Mr. FRENCH is willing to let everybody have one at the small price of twenty-five cents.

FINE ART WORK.—Nothing in the Floral Hall Art Gallery attracts more favorable attention than the landscapes and pictures photographed

by Mullen, of Lexington, Ky. The landscapes are inimitable, and elicit unbounded admiration from every lover of art. Among other beautiful landscapes is a beautiful toll-gate scene, which is exquisitely realistic. All the landscapes are equally beautiful. The scenes and views are all admirably brought out. MULLEN took the premium on landscapes, and it is needless to add that he richly deserved it. His photographs were much admired both for their trueness to nature and their fine finish. The photographs of babies and children made by the instantaneous process were admired by all who beheld them. MULLEN'S art of photographing children cannot be excelled. Prominent among his photographs is a large cabinet photograph of Miss Martha Bryan, of Fayette County. All who have ever seen Miss Maltha admired the picture very much. Her queenly form, flashing black eyes, and beautiful expression, are wonderfully well portrayed, making a picture of which any artist might well be proud. It is needless to add that Mr. MULLEN captured all the premiums offered for photographs at the fair this year, both for photographs and landscapes, We congratulate Mr. MULLEN on his well-deserved success. Having seen so much of his work we can testify to its excellence.

WE have received the following:

St. John's University.

MR. E. L. WILSON.

DEAR SIR: Your favor of the 3d instant, requesting me to help you to get up Mosaics for 1885, received. I would gladly comply with your request, but being only an amateur of a few years' experience. I prefer to take instructions, at least for some time to come, before I attempt to teach others. I took to photography about three years ago, and the little I know to-day I almost exclusively owe to my friend, Mr. E. L. Wilson. I have never spoken to you, but since the time your Photographics made its first appearance hardly a day has passed that you did not speak to me through your book. I never failed to get Mosaics from the time I began, and I am, these two last years, a diligent reader of THE PHILADELPHIA PHOTOGRAPHER, and intend to keep it as long as I have anything to do with photography.

With to-day's mail I send you a few samples of my work. Of course, I am fully convinced that they cannot compare in any way with those that you receive from others. I send them merely as a grateful acknowledgment of the services you rendered me through your valuable

publications, for I have received no instruction whatever from any other. You have many an encouraging word for the poor amateur, who must struggle hard before he sees his efforts crowned with success. I can never read the "Concluding Confab" of your Photographics without receiving a new impulse to work and labor to perfect myself in the art.

Yours Respectfully, PETER ENGEL, O.S.B.

Collegeville, Minn., September 13, 1883.

Were the work which Mr. ENGEL has had the kindness to send, merely first-class, we should be pleased to know that we have contributed by our publications, our little to the advancement of the great cause; but we are proud when we look at the beautiful work this gentleman has sent us. We do not know any professional photographer who would not be glad to own them as his work. The subjects are well chosen, and highly artistic, beautiful effects being given by a choice and judicious selection and grouping of the objects.

PPOF. HIMES, of Carlisle, Pa., who carried on so successfully the summer school of photography, has suggested the organization of a national association of amateur photographers. The idea seems to have met with great favor. Mr. F. C. BEACH, President of the Society of Amateur Photographers of New York, rightly thinks that such an association, composed of representatives from every amateur club and society in the United States, would be of the greatest interest and value to photography among amateurs. He well remarks "that photography is certain to grow in popularity, and those who practise it have a natural desire to display their work. The best means to accomplish this is by local organizations and clubs. It will have a tendency to increase the number of new clubs when the advantages which photography gives are known. There should therefore be some national association under whose auspices annual conventions of representatives of the various clubs could be held. In this way the work made by amateurs in all parts of the country can be compared, and exhibitions given of the various interesting subjects treated."

The society of which Mr. Beach is President has, we learn, passed a motion to communicate with other societies upon this important subject. There is no doubt that it will meet with a hearty response. We can only add a word to

what Mr. BEACH has already expressed-that the value to be derived from competition in a good cause cannot be overestimated. Photography as an art is every year widening its borders, and we believe that much of its progress is due to the free interchange of the ideas which are called forth in annual conventions and exhibitions. The desire to excel is planted in every well-constituted man, and if we are ignorant of what others are doing, how shall we attempt to rise above ourselves. Our own efforts will be our standard, and we will retrograde rather than progress. We would urge all concerned to further this good idea of Prof. HIMES and Mr. BEACH, and the advance which the art will make amongst amateurs' will abundantly repay.

O. P. SCOTT, PHOTOGRAPHER .- Down in the southeastern end of Floral Hall, occupying a large space, and so displayed that passing thousands must see it, is the splendid collection of pictures from the studio of Mr. O. P. Scott. It is a travelled exhibit, and has been admired by critical and professional eyes as well as by simple visitors at the Exposition. It has added fame to the Gem City, for it has been heralded all over the United States that the collection of Mr. O. P. Scott, of Quincy, Ill., was given second place at the great National Photographers' Convention recently held at Cincinnati. This distinction will be better appreciated by our readers if they will but pause to think that Mr. Scott's exhibit came into competition with the largest, best, and most thoroughly appointed photograph galleries and the ablest artists in America. It was not an empty honor he returned with; it was a proud reward to be proudly possessed and zealously guarded.

It was for this exhibit of pictures, as well as for plain photographs, that the Quincy Exposition Committee awarded Mr. Scott diplomas and medals.

There is something about Scott's works that challenges admiration. It is characterized by cleanliness of features, sharpness of expression and brilliancy of tone or shading.

The enterprising firm of Buchanan, Smedley & Bromley, photographic stockdealers of our city, have favored us with a beautiful engraved glass plate bearing their name and place of business. Messrs. Buchanan, Smedley & Bromley are well equipped to supply the trade with everything needed in the photographic line. They are an enterprising firm, well up to the times

with new goods, and alive to every improvement, and all who deal with them will find that they may safely depend upon their representations.

WE are sorry to learn that the veteran photographer Mr. A. BUSHBY, of the firm of BUSHBY & MACUNDY, has determined to lay aside his photographic armor after an active service of over twenty-two years, and retire from the field. The firm has enjoyed a long and well-earned reputation. Mr. BUSHBY is desirous of securing a successor who will enter into an engagement with his present partner, who is anxious to carry on the business. This is an excellent chance for some one who would like to invest in a profitable business. They have thirty thousand negatives, a lease of five years on the building, beautiful operating-rooms, studios, printing- and reception-rooms, and every facility for business, are located in the best portion of the city for trade, and command the best prices for their work. 521 Washington Street, Boston, Mass.

WE have received from Messrs. ZIMMERMAN BROTHERS, St. Paul, Minn., a large and beautiful map of the Yellowstone National Park. Nowhere in the world are there so many wonders grouped together than in this space of sixty miles square. It is just the place for the amateur photographer to revel in, and Messrs. ZIMMERMAN BROS. are well prepared to supply all who purpose going thither, with all the requisites necessary for doing good work.

Change of Business.—The great demand for the Passavant Dry Plates upon the Pacific Coast having increased to such an extent that the quarters formerly occupied have been found inadequate, Dr. Passavant has purchased Taber's extensive works and incorporated them with his own, making one of the largest and best fitted up factories in the West. With these increased facilities he will be able, in a measure, to meet the demand, which is not confined to the United States, but has extended to China and Japan. His new address is No. 306 Guerrero Street, San Francisco, Cal.

SUMMER SCHOOL OF AMATEUR PHOTOGRAPHY.—
We learn that the enterprise conducted at
Mountain Lake Park by Prof. Himes, was a
most gratifying success to all parties concerned
—to the Park authorities, to the students, and
to all who had in any way contributed to its
success. The project was so novel that prepara-

tions for it at the Park were of a very imperfect character, and few had indicated a purpose to participate, but after an introductory lecture by Prof. Himes, explanatory of the scope and methods of the school, a class was organized which soon reached thirty, more than half of them taking the complete course in both wetand dry-plate photography. The enthusiasm and application of the students are represented as remarkable, and there were few wasted opportunities or privileges. A large number supplied themselves with outfits at the close of the school, and have been practising with encouraging success. A marked feature of the school was the fact that it was not left exclusively, or even in great part, to the patronage of the young, but the contagion took hold of even staid doctors of divinity. An exchange club was organized, and it is proposed to make photography a feature at this summer resort. We are promised fuller details for our next, and also expect to present Prof. Himes's plan for a national amateur association, as first suggested by him several months ago.

MARRIAGE OF MRS. FITZGIBBON.-Mrs. J. H. FITZGIBBON, widow of the late photographer of that name, was married last evening at 8 o'clock, to Mr. CLARK, of Washington, Ga., who recently disposed of his business in that city to make his home in St. Louis. Yesterday's wedding was the consummation of a romantic attachment which originated several months ago in a brisk correspondence, both parties having mutual friends, and there was only a brief meeting of fifteen minutes until the wedding day. A small circle of friends assembled to witness the ceremony, which was performed by the Rev. Dr. BERKLEY, according to the rites of the Episcopal Church, at Mrs. FITZGIBBON'S residence, 2334 Olive Street.

Photographic Mosaics for 1885.—This favored annual is in process of evolution, and will shortly appear, greeting the photographer with the best thoughts of the profession. Contributions are rapidly coming in from all quarters—from home and abroad. We still invite those who have something good to communicate to the fraternity to send in as soon as possible their essays, so that we may satisfy those who are already clamoring for it. Good as it has been in the past, it will surpass, this year, all previous issues. The demand for it increases from year to year, a sure indication of the value that is set upon it. To those who send us con-

tributions we present a bound copy of the book, post-paid. Please let your article be of a practical character, pointed and clear, but if possible, not dry.

THE WORLD'S EXPOSITION AT NEW ORLEANS .-This year another great exposition is to be held in our country in the far South, at New Orleans, which in magnitude and importance will outstrip our own Centennial, great as it was. The Centennial was a preparatory school, we might almost say, where we learned to appreciate the importance of our own domestic resources, and to understand the great value of foreign countries ripe in the experience of the past. Now, again, the world is called together at New Orleans, and we, as a nation, are better prepared to meet them upon the high vantage ground of competition. By the photographer, especially, this Exposition should be taken advantage of. Our art, since, 1876, has made wonderful progress, and the work of American photographers, by its excellency of character, and artistic beauty, is recognized and appreciated throughout Europe. We, as editors of this magazine, receive frequent comments from foreign journals upon the beauty of the embellishments which grace our pages from month to month. Do not, therefore neglect the great opportunity to widen the horizon of your reputation. The great world of the southern continent, full of energy and young vigor, will look to you as guides, therefore begin at once to prepare for the great event. The call has already gone forth for trained hands to labor. They leave their homes not for a barren and inhospitable region of oppressive heat and insalubrious atmosphere, but for one of the loveliest place in the world, away from the frost and chill of winter and regions of thick-ribbed ice, to an elysium, to a world of pleasure and gay festivities, to a people courteous and agreeable, who have made every preparation as the world's host to receive her guests magnificently. We therefore call especial attention to the advertisement in our pages.

Wanted Photographers—Printers, Toners, and Mounters—To work at the World's Industrial Exposition, at New Orleans. Parties desiring to winter in the lovellest climate and most curious city in America. Here have a chance for employment and pleasant work. Address New Orleans, care of Philadelphia Photographer, 1125 Chestnut Street, Philadelphia.

In press, Mosaics for ISS5.

Specialties.

MAKE OUT YOUR OWN BILL, and remit cash with your advertisements, or they will not be inserted.

ADVERTISING RATES FOR SPECIALTIES.—Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. & We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement. Postage-stamps taken.

WE are now located in our four-story and basement, seventy feet deep building. We have a stock of summer accessories on hand, and can deliver backgrounds at short notice. Several new articles, very desirable for summer, ready.

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My new studio is fitted up with all the modern improvements, and the most refined demands from a critical public can be satisfied. A visit to my establishment, which has the largest showroom, containing the greatest amount of stock of any place in the world, will be gratefully appreciated.

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EVERY photographer in want of excellent lenses, for any purpose, will best serve his interest by consulting the new illustrated price-list of Messrs. Benjamin French & Co. before purchasing.

ROCKWOOD SOLAR PRINTING CO.

17 Union Square, New York.

TIME.—It is our intention that every order received in the morning's mail (when not to be put on stretchers) shall leave this establishment the same day or the following morning. If too late for the morning work, it is sent on the second day. Having our own engine and electric light, we are not at all dependent on the weather.

GEORGE H. ROCKWOOD, Business Manager.

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\$4.00. Post-paid. \$4.00.

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Thomas H. McCollin, of Philadelphia, is no longer agent for the sale of materials for

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Licensees, both amateur and professional, and all who are interested in the process, will please address all orders and communications to Willis & Clements, proprietors of the patents, or to Buchanan, Smedley & Bromley the only authorized general agents for the sale of materials in the United States, 25 North Seventh St., Philadelphia, Pa.

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No. 18. VIGNETTE No. 18.

The old form of No. 18, Waymouth's Vignette Papers, oval, has been discarded, and a new pear-shaped style is now ready in its place. It is a beautiful piece of gradation and prints perfectly. Price \$1.25 per dozen. For sale by all dealers. See advertisement for all sizes.

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CRAYON AND WATER-COLOR PORTRAITS.

Solar prints and photographic enlargements furnished and finished in crayon, Indian ink, or water-colors. Photographic coloring on plain or albumenized paper and porcelain. Copies finished in Indian ink and water colors.

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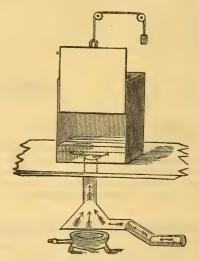


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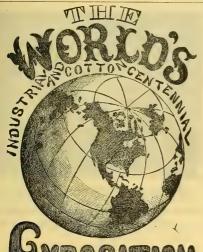
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The fancy-shaped mounts now so fashionable among photographers, require metal guides with which to cut the photographs. They are now kept on hand, and can be supplied in the following shapes, and at the prices mentioned:

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Cross		\$1 05
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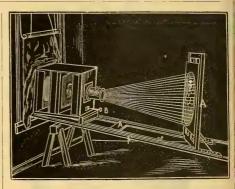
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A FIRST-CLASS operator and business manager of over fifteen years' experience in photography, and for many years in full charge of one of the leading establishments of the country, desires to make an engagement, or enter into a partnership in a first-class house. Has used dry plates for several years with the greatest success. Is also a good accountant and correspondent, and can furnish the very best reference. Communications strictly confidential.

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By a lady. Can retouch, spot, mount, and attend-reception room. Address C. Tracy, Hartford, Conn.

In a first-class house, by a first-class retoucher, who also understands operating and printing. Recommendations furnished. Speaks English and German. Address Henry Borgfeldt, Broadway House, Mauch Chunk, Pa.

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In any position, if absolutely necessary, or will run any one branch in a good gallery. Situation lost by fire. Address E. G. Maire, Wheeling, W. Va.

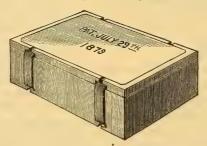
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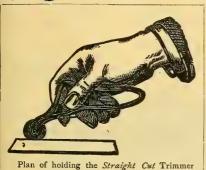
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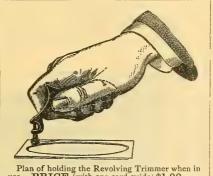
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These invaluable instruments are already used all over the country, and now, a change of form having permitted an immense reduction in price, they must soon be UNIVERSALLY USED as they afford a quicker, better, and less expensive means of trimming photographs than any other. The inventor assures photographers that his trimmers can be used with greater ease when held as indicated in the drawings below. These trimmers are now made entirely of metal, and in quality are fully equal to those of the old model. They answer for oval, round, arch top, and square



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Plan of holding the Revolving Trimmer when in use. **PRICE** (with one card guide) \$1.00.

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$2\frac{1}{8} \times 3$			61 7 91	$2\frac{1}{8} \times 3\frac{3}{4}$	$\begin{array}{c} 2\frac{5}{16} \times 3\frac{7}{8} \\ 2\frac{3}{4} \times 4\frac{1}{4} \end{array}$	$2\frac{7}{8} imes 4\frac{5}{8}$	$4\frac{1}{8} \times 5\frac{7}{8}$
21 - 2		$5\frac{1}{4} \times 7\frac{1}{4}$	$6\frac{1}{2} \times 8\frac{1}{2}$	$2\frac{1}{8} \times 3\frac{1}{8}$	$2\frac{3}{4} \times 4\frac{1}{4}$	$3\frac{7}{8} \times 5\frac{1}{4}$	$3\frac{7}{8} \times 6$
$2\frac{1}{8} \times 3$		$5\frac{1}{2} \times 7\frac{1}{2}$	7 x 9	$2\frac{5}{16}$ x $3\frac{15}{16}$ _	7 7	0 1	$4 \times 6\frac{1}{8}$
$2\frac{3}{8} \times 3$	$\frac{3}{8}$ $3\frac{5}{8} \times 5\frac{1}{8}$	$5\frac{5}{8} \times 7\frac{5}{8}$	$7\frac{1}{4} \times 9\frac{1}{4}$	216 7 016 E	OR STERE	OGRAPH	S 111 08
$2\frac{5}{8} \times 3$ $2\frac{7}{8} \times 4$	$\frac{5}{8}$ $4 \times 5\frac{3}{8}$	$5\frac{3}{4} \times 7\frac{3}{4}$	$7\frac{1}{2} \times 9\frac{1}{2}$	Arch Tops		Cornered.	Round.
27 x 4	$\frac{1}{4}$ $\frac{4^3}{8} \times 6^{\frac{3}{8}}$	6 x 8	73 - 03				3 x 3
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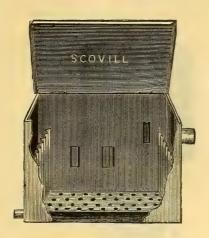
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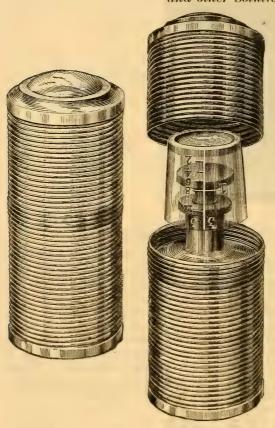
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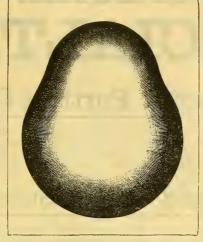
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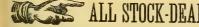
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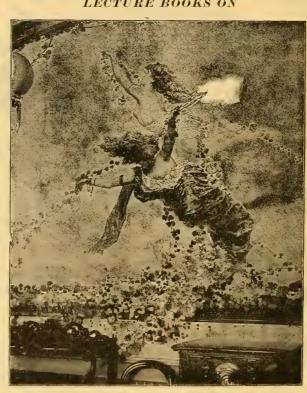
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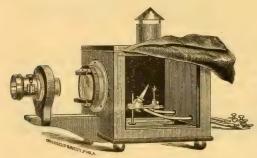
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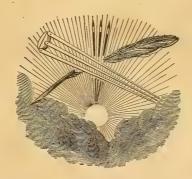
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Your sure truly, Smith & Partison, it's a "daisy." CHICAGO, September 12, 1884. ALLEN BROS.

LOGANSPORT, IND., September 15, 1884.

ALLEN BROS.

Gents: I am greatly pleased with the No. 5 B Suter Lens bought from you. All the claims you make for it are fully sustained. I should consider the loss of my little lens a very great deprivation. In fact, I could not now do business without it, and I have had twenty-eight years' experience. Yours truly, A. W. Donald not now

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Dear Sirs: We have been trying the instrument, and as a recommendation would say it is a "dandy." You can warrant the No. 5 B to cut a 14 x 17 full figure hereafter. Enclosed please find draft for same.

Respectfully yours, M. V. Chapman & Son.

CHICAGO, October 4, 1884.

Арківи, Місн., Осторет 14, 1884. Dear Sire: The two small Sufer Lenses you sent are perfectly satisfactory. I consider them the very best lens for the price in the market that I have tried, and I have used all makes.

Gentlemen: I must say I am greatly pleased with the Mo. 6 B Suter Lens you sold me. I did not know before what a lens was. You are safe to speak highly of it.

CHICAGO, September 8, 1884.

Gentlemen: Please hurry up the lenses ordered of you as our customers are very anxious to get them. The ones that you shipped to us have been sold, and the parties are more than pleased. We are astisfied that we can sell a great many of them, as they seem to give perfect satisfaction in every instance. You certainly have one of the most wonderful lenses in the market, and we hope that you will be able to get them fast enough to supply the demand, which is certainly going to be very heavy.

Yours truly, Smith & Partison.

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GENTLEMEN: Having tried the No. 5 Sufer Lens, I am quite satisfied it is the finest of the kind I ever saw. I made a nx x 14 furniture negative in the state and on a wet plate in eight seconds, and on the whole I consider coests nearly double in price. Made a large 8 x 10 head on a wet plate in eight seconds, and on the whole I consider it a wonderful lens. Shall want a No. 6 B also.

FRED. CHOUINARD.

GRAND RAPIDS, August 22, 1884.

ALLEY BROS.

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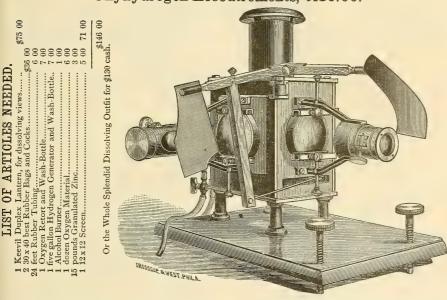
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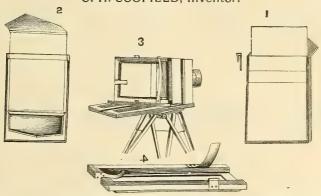
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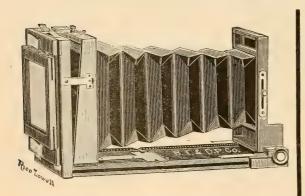
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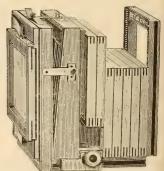
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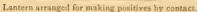
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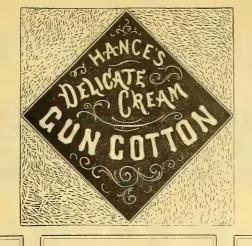
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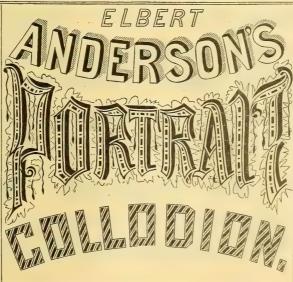
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Philadelphia Photographer.

EDITED BY EDWARD L. WILSON.

Vol. XXI.

NOVEMBER, 1884.

No. 251.

THE NEW ORLEANS EXPOSITION.

SINCE our thoughts on this subject, prepared for our last issue, we have very unexpectedly made a visit to the scene of action.

It appears to be the habit of Director-General A. E. Burke, when he needs help in any particular department, to send persuasive telegrams to parties au fait in their various professions, inviting them to a conference.

By no means did he intend to overlook photography. His invitation, telegraphed to the Convention at Cincinnati, to hold the next P. A. of A. Convention and Exhibition there, was an evidence of the foresightedness which characterizes all his transactions in the great work of which he is chief. Therefore, when the photographic exhibit came up for consideration, he resorted to his usual plan of securing it, and we became the victim. We responded to his call in person, and came away with the appointment of the Superintendency of the Photographic Art Department added to our work. We consented to this because of the deep interest in our art. More than we could possibly make plain in the brief time given us at the Cincinnati Convention, do we now feel the great importance of photography making an immense display at the New Orleans Exposition.

Not only will it show our art to be equal in enterprise to the other industries of our great country, but it will enable our fraternity to compete with the world for the prizes offered. It will win our art fame, and it will place American photography at the head of the world. Moreover, it will teach the world what attainments have been made by our art, and how useful it has become to the household, to business, to science, and to the kindred arts. Let the exhibit, then, be a grand one, and let a glorious meet of the fraternity be held there some time during the half year of the Exposition.

With the hope that this will be so, the committee appointed at Cincinnati have caused to be sent to all whose addresses are obtainable a circular, having a part of the matter below, and a great deal more, and a blank application for space. (See a report of their plan in another place.) The latter are sent, that some idea may be given your Superintendent what preparation to make.

Let all who are able to make a creditable exhibit respond. We cannot appeal personally to all, for the time is insufficient.

Please respond now if you have not done so, and prepare to attend the Convention in the spring.

It may be an informal one if necessary, but we believe the committee in charge will prepare some matters and a programme which will interest and help all who come. What follows will show what ample preparation has been made, and yet it does not tell a tithe.

We were delighted with New Orleans personally, and rest assured the whole Exhibition affair will be a grand one.

In the matter of health physical and health photographic, a visit there cannot but prove beneficial.

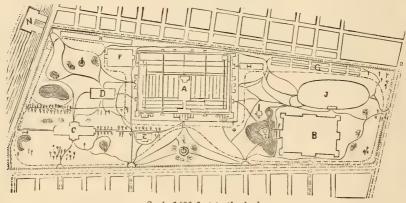
Under the shade of the moss-bedecked live-oak; breathing the blossom-scented air of the magnolia and the orange, with picturesque scenes on all sides, oh, who will not enjoy it all?

Some idea of the preparation made for the grand Exposition may be had by examining the ground plan. foreign countries, so that, if our American friends do what they can, the grandest showing of photography ever known to the world will be seen by millions of people.

Buffalo will grow cleaner and better for our purpose in a year more; and, although scientists predict the contrary, Niagara Falls will remain a while longer; but there will be only one New Orleans Exposition. Join in making it a credit to us all.

The Main Building is the largest ever erected. It is 1378 feet long by 905 feet wide, without courts, and has a continuous roof composed largely of glass so arranged

THE GROUND PLAN.



Scale 1430 feet to the inch.

A-Main Building.
B-United States and State
Exhibits.

C-Horticultural Hall.

D-Mexican Buildings.

E-Art Gallery.

F—Factories and Mills.
G—Live Stock Stables, etc.

H-Restaurants and Refresh-

ments.

I-Grand Fountain, eighty feet high.

J-Live Stock Arena.

K-Saw Mills and Woodworking Machinery.

L-Wharf, Mississippi River.

The grounds embrace the space of 247 acres, bounded on the north side by St. Charles Avenue, on the south by the Mississippi River. The buildings front east, toward the main portion of the city.

An electric railway encircles the ground.

The North Gallery, east section of the Main Building, has, at our request, been set apart for the grand photographic display. No better could be had. The arrangement for lighting the alcoves will be just right and all alike, so that there can be no choice, no accusation of favoritism being shown. It seems as though the architect must have conceived the spot for the purpose.

We are promised many fine exhibits from

as to afford an abundance of light without subjecting the interior to the direct rays of the sun. Within, the view is unobstructed. From one side or corner of the building to its opposite, the interior showing all the phases of industrial activity is seen. There are no partitions; and the lofty pillars, wide apart, supporting the roof structure, present no impediment to one's vision, but only serve to assist the eye in measuring the vast expanse. The interior is surrounded



THE MAIN BUILDING.

by wide and spacious galleries, 23 feet high, which are reached by 20 elevators having the most improved safety appliances, and by convenient stairways.

The machinery department occupies a space of 1378 feet long by 300 feet wide, within the main building, and has an extension added in iron 350 feet long and 150 feet wide for heavy machinery, described under the heading of Factories and Mills. From the galleries overlooking, more than two miles of shafting can be seen driving every known character of machinery.

Music Hall, with a seating capacity, in commodious chairs, for 11,000 people, a platform capacity for 600 musicians, and a mammoth organ built to order for the Exposition occupies the centre of the interior.

The main building will contain general exhibits. It is situated (as will be seen by the ground plan on another page) about in the centre of the grounds.

The photographic exhibit will be in the gallery shown on the right of the picture.

The United States and State Exhibits building is 885 feet long by 565 feet wide. It is one of the largest Exposition buildings ever erected. At the time of the adoption of the plans, it was supposed that

the Main Building, having the largest capacity of any building heretofore erected, in conjunction with the Horticultural Hall and such minor outside buildings as were necessary, would afford ample space and accommodation for all exhibits; but the interest in the World's Exposition had become so wide-spread, and the inquiries and applications for space became so numerous, that the necessity for additional accommodation became imperative, and the management determined upon the erection of this magnificent structure specially for the United States and State Exhibits. Government exhibition will be completeof itself, almost a mammoth Exposition. Each department will have its distinctive exhibit. The Department of State showing samples of cotton, wool, and cosmos fibres, and of the fabrics made from them from all parts of the world. This exhibit will be arranged in continental groups representing the geographical divisions of the world's commerce, etc. The Post Office Department will exhibit all the improvements in mail facilities, and establish a branch office in the building for the accommodation of visitors, and to show the practical workings of the Postal System. The Treasury Department will exhibit coast survey, light-



UNITED STATES AND STATE EXHIBITS BUILDING.



THE ART GALLERY.

housing, life-saving service, customs, internal revenue, engraving, printing, etc. The War Department will show arms, ordnance, engineering, medical, surgical, and hospital services, progress in same, etc. The Navy Department will show naval arms, ordnance, projectiles, torpedoes, dynamo-electro machines for firing, models of war vessels-ancient and modern, etc. The Interior Department, everything pertaining to the inventions and improvements in American industries and to the history, customs, and habits of the aboriginal races, etc. The United States Fishery Commission, the Department of Justice, Bureau of Agriculture, the Bureau of Education, and especially the Smithsonian Institution, will be exhaustively represented. The Government exhibit will vastly exceed that made at Philadelphia. In addition to the Government exhibits, the collective State exhibits, and the general educational display will be located in this building.

The Horticultural Hall is 600 feet in length and 194 feet wide through its centre.

It is the largest conservatory in the world. It is substantially built as a durable structure, becoming, by arrangement with the city, a permanent feature of the Park. It is located on high ground, in the midst of live-oak groves. Surmounting the centre is a magnificent tower, 90 feet high, roofed with glass. Beneath this tower, in constant play, is a grand fountain. 20,000 plates of fruit, double the amount ever before displayed at any Exposition, will be shown on tables extending through the hall. Around the hall will be arranged an infinite variety of rare tropical and semi-tropical plants, flowers, and shrubbery. There is a tropical hot-house, 250 feet long by 25 feet wide, in which the most delicate flowers from the far South will be nurtured and made to bloom in their most brilliant perfection. Tropical fruits in the various stages of growth will be exhibited. Fruits of every section and the production of all seasons will, by arrangements for stated supplies and thorough processes of cold storage, be available for exhibit.



THE BUILDING FOR FACTORIES AND MILLS.

The most eminent horticulturists of the United States are engaged in arranging and perfecting the display.

The Art Gallery is 250 feet long by 100 feet wide. It is a structure built of iron. The building is an elegant and artistic structure, so arranged for mounting, accessibility, and light, as to present the best effects, and with ample accommodation for as large a collection as was ever exhibited on this hemisphere. It will be fireproof—even the partitions being of iron. It was intended to place our art within this building, but there was not room, and the space accorded it is far preferable,

The building for factories and mills is a large iron building 350 feet long by 120 feet wide. In it will be exhibited cotton in all stages of manipulation, from the boll to the bale. The newly invented "Cotton Pickers, Openers, and Lappers," as well as the various and complex machinery for ginning, cleaning, baling, and compressing, will be in constant operation. The supply of field cotton for this purpose will be abundant.

In addition to cotton machinery, this extension of Machinery Hall will contain the various kinds of machinery used in the rolling of cane and manufacture of sugar, and in the harvesting and milling of rice.

Various kinds of factory and mill machinery for wood-working, brick- and tile-making, etc., will be located in this structure. Adjacent to this building there will be a line of saw-mills, extending toward the river showing forty saw-mills in motion.

A hundred other structures will be added here and there, of all sorts.

The significance of the World's Exposition is readily seen. Nothing can be more contracted than the notion that the World's Industrial Exposition is a small affair that has no widespread and lasting influence and no significance outside the Southern States. It is not only a world's fair in the best sense of the term, but it is the biggest in buildings, in number and variety of exhibits, in special features, in the number of nations and peoples who have contributed to give it a universal character. It impels States to enter the lists as honorable rivals; it causes

the foreign manufacturer to contend with home producers for the mastery in many lines of human endeavor. It makes the whole nation know its weakness and its strength at a glance. It will enable more people to come together who have heretofore been left out of the procession, and present opportunities of forming friendships and promoting a general good will among all nations, such as have never occurred be-It will enable hundreds of thousands of visitors to become acquainted with the natural wealth of the South. The Central and South American Republics will be brought to the front for the first time. Manufacturers will have a chance to see and talk with many representatives of the forty millions of consumers who live to the South of our country, and with whom it is one aim of the Exposition to cultivate such friendly relations that they shall become desirable customers for our manufactured articles. The exhibit of the products of American and Mexican mines displayed at the Exposition will be larger than has been heretofore attempted. The Cotton Centennial feature alone will engage the attention of the people of every country.

The Exposition is not sectional nor purely American, except in the idea of its magnitude. It ought not to be a difficult matter to understand the significance of the World's Industrial Exposition of 1884-85. Come and see it.

THE COMMITTEE ON PHOTOGRA-PHY AT THE NEW ORLEANS EXPOSITION.

A MEETING of the committee appointed at the Cincinnati Convention to see that photography was properly represented at the great Exposition to open in New Orleans in December, met at the office of The Philadelphia Photographer on Wednesday, October 8th, Edward L. Wilson in the Chair. Mr. Wilson was elected permanent Chairman of the Committee, and Mr. F. C. Beach Secretary. Mr. Wilson stated that he had made a recent visit to New Orleans in his official capacity, and had secured from the Director General and Chief of Installation the refusal of all needful

space in the northeast corner of the Main Exposition Building for the national photographic display, free from all entrance charges; that he had also secured the coöperation of the management, and their promise that no pains should be spared to give photography the best possible showing and opportunity. Moreover, the Chief of Installation agreed to send to every photographer in the United States a circular letter, with a blank application for space, in order that the time and trouble of the photographer might be saved and expedition secured, since the time is short. blank applications are to be filled and returned by all intending exhibitors at once, and they may expect no response. As to space, abundant will be secured for whatever may be sent, as photography can be represented on alcoves as a rule, and they can be multiplied without end quickly.

On motion of Professor Himes, the Director-General was tendered a vote of thanks, and Mr. Wilson's action in this matter was approved.

After considerable discussion as to the best plan of securing exhibits for this enterprise, it was resolved that four committees be appointed by the Chair, and they were appointed for the various divisions of the work as follows: On photographic apparatus and requisites, Col. V. M. Wilcox Chairman; on education, history, and literature, Prof. Chas. F. Himes; on amateur photographic societies, Mr. E. F. Beach; on practical photography, Edward L. Wilson.

Mr. Wilson stated that while in New Orleans, at the request of the Chief of Installation and Director-General, he had accepted the honored position of Superintendent of the Photographic Department; that he expected to be present during the necessary time of installation, and would give his best services for the interest of the craft, and see that photography was duly taken care of and honored.

The committee desire that great interest be taken in this subject, and that every photographer who feels that he has work of quality worthy of being shown will make some exhibit. Amateur societies will be called upon to make their exhibits collectively, so that the various cities blessed with amateur societies will have their work arranged collectively, unless it be the request of individual members to have their work exhibited alone. We also trust that great interest will be taken in this matter, and that everybody will come and see what a magnificent display has been secured by the means of this committee and their coworkers.

A NOVEL AND BEAUTIFUL SERIES OF PHOTOGRAPHS.

WE are no longer surprised at anything photography does, but we cannot refrain from expressing our admiration occasionally at what some of its votaries do. A photographer with artistic feeling and taste has an unending source of pleasure in the practice and prosecution of our art. Nothing affords the amateur more enjoyment than does his photographic camera. Those who have a scientific bent will find both their physical and chemical inclinations gratified in the practice of our art. Those who are bent artistically will also find much to give them pleasure and enjoyment. Mr. W. A. French, of Boston, must be one of this latter class. Not only this; he must have a keen admiration for the historical.

Those who were at the Cincinnati Convention will remember him. He has made an attractive series of negatives which he classified there of some old homesteads of the colonial period in Boston and vicinity. So interested were we in this unique collection of Mr. French that we asked him to supply us with a list of his pictures, together with some historical points concerning the subjects. We did this, thinking it would be an admirable and useful suggestion to many of our amateur friends to make their hobby useful as well as ornamental. Mr. French has kindly responded to our request and supplied us with a list, with some remarks concerning his excellent work, which may be found below.

BOSTON, September 17, 1884.

MR. E. L. WILSON.

DEAR SIR: I enclose the list of old homesteads I had at Cincinnati. My collections include many more, but these are the most

interesting. They are valuable as studies of the peculiar style of architecture employed since the settlement of Boston, and as souvenirs of places rendered famous by events which occurred during the War of Independence and at later periods. Some have no other significance than being identified with some of our oldest and best families, and on that account alone are held in high esteem. Many of these old landmarks are so situated that there is no danger of their suffering the fate of the old "Hancock House," one of the greatest relics of Boston's history, and a genuine desire pervades the community that these silently eloquent witnesses of the beginning of this great nation may never be touched by a vandal hand. I send you this and other particulars, since I understand that you desire to publish the list. A little information of this sort is of no detriment to the photographer, especially when he claims to be a man of feeling and artistic temperament.

Hastily yours, Wilfred A. French.

The following is the list enclosed by Mr. French:

Old homesteads of the Colonial period in Boston and vicinity, all standing as originally put up, and occupied by the lineal 'descendants or tenanted.

I. Craddock House, erected in 1632 or 1634, the first brick building in New England. Built for Governor Craddock, the first Governor of the Massachusetts Bay Colony, but not occupied by him, as he never left England. Now used as a tenement house. Soon to be acquired by the town as a valuable relic, and to be kept in order.

II. Pierce House, built by Robert Pierce in 1640. Finely preserved, only the chimneys are modern.

III. Fairbanks House, in Dedham; erected in 1636. One of the most picturesque spots in the State; a constant delight to the artist, and photographed at least once every fair day.

IV. Aspinwall House, built by Peter Aspinwall in 1660. A fine example of the few remaining Puritan dwellings, with double gable front. Still in the possession

of the Aspinwall family, who are determined to preserve the old relic; together with a shapely elm close by. It forms an exquisite picture.

V. Auchmuty House, built by the younger Judge Auchmuty, a noted Tory, in 1761. Some of the most important events in American history were planned or executed within its precincts. Now occupied by C. F. Bradford, Esq.

VI. Shirly Place, the grand old Tory mansion, elegant and imposing. Built by Governor Shirly in 1748, of material brought from England, the home of Governor Eustis. Such men as Washington, Franklin, Lafayette, Webster, Clay, Calhoun, and Burr were numbered among its distinguished guests.

VII. Wells House, on Salem Street. Built in 1680, from timber grown on the spot. Most perfect existing example in Boston of overhanging stories, which afforded shade and enabled the occupants better to defend themselves against Indian attacks.

VIII. Curtis Homestead, 16—. An immense elm gives grateful shade to the old, time-worn structure. Identified with Eliot, the Apostle.

IX. Blake House. Built prior to 1650, by Elder James Blake. It remained in the Biake family till 1825; still counted among the first in Boston.

X. Willow Court House, erected in 1750, by Ebenezer Clapp. It prides itself by having sheltered Washington.

XI. Hallowell House dates back to 1738; owned by Captain Benjamin Hallowell, a strong Tory, who hastily vacated the place in 1775. Commanded a British war-ship during the Revolution. Appears as solid and fresh as though but very recently put up. Charming grounds.

XII. Holmes House, near Harvard College, built in 1730. Figured very prominently during the Revolution. The Committee of Safety met here, the battle of Bunker Hill was planned here, and many other events of note could be enumerated. It is also the birthplace of our beloved Oliver Wendell Holmes, who occupied it until recently. The old structure was removed last July, giving way to the march

of improvement, the land being required for another purpose.

XIII. Home of Paul Revere, erected soon after the great fire of 1676, which swept away this portion of the old city. Paul Revere resided here at the time of his famous ride, and gave the striking exhibitions of transparencies on the evening of the Boston massacre. This is the second best example of houses with projecting stories now standing within the limits of Old Boston. The windows in the front are modern; portions of the interior have also been remodelled. The kitchen yet remains, with only slight changes to suit the requirements of the present day.

XIV. Newman House, built about 1720-35. Robert Newman, the Patriot, who, from North (Christ) Church, displayed the lantern signal to Paul Revere, lived in this house at the time, and was the sexton of the church.

XV. Shedd House, built in 1674, and situated in the Brighton District. Fine example of double-pitched roof, the rear part having three inclines.

XVI. Davis House, dates back to 1707.

XVII. Dana Mansion, two hundred years old, both situated in the Brighton District.

XVIII. Wadsworth House, built in 1726, the "Presidents' House," occupied by the Presidents of Harvard University from President Wadsworth to President Quincy. Now occupied by Harvard students as a dormitory.

XIX. Longfellow House, erected in 1735, by Colonel Vassal. Used by General Washington as his headquarters during the siege of Boston; afterwards owned by Andrew Cragie, and occupied by Sparks, Worcester, and Everett. Longfellow bought it in 1837, and lived there until his death. The interior is quite interesting—the "old clock," the late poet's apartments, etc. The grounds are extensive and very beautiful. Now occupied by the heirs of Longfellow.

XX. Royal Place, Medford, built in 1787, and long considered the finest estate in North America. Isaac Royal was a large slave-owner, and the brick negro quarters are still intact.

XXI. Edes House, the oldest house in Bunker Hill District; the first dwelling

erected after the destruction of the town during the battle of Bunker Hill, June 17, 1775. It was built by Captain Robert Ball Edes. Birthplace of Samuel F. B. Morse, the inventor of the electric telegraph.

XXII. Gardner Mansion, built prior to 1800, by Dr. Gardner, father of Governor Gardner, the first candidate for that office of the Know-Nothing party. Very singular shape, like an ellipse, and a veranda extending nearly around the house.

XXIII. The Charter House, built over two hundred years ago, by John Foster, an eminent merchant of his time. In this house was secreted the Colonial charter of the Massachusetts Bay Colony during the troublesome times of 1681.

GERMAN CORRESPONDENCE.

Some Corrections in Regard to my Letter in the August Number—Concerning Photomechanical Printing Establishments in Vienna and the Processes Employed in Them.

I HAVE returned from a trip through Bavaria and Austria, and I find at home a great many photographic journals, among them the August number of THE PHILA-DELPHIA PHOTOGRAPHER, which is always wescome to me. But you will kindly excuse me if I take the opportunity to correct some mistakes in the German Correspondence, on page 251. These letters, published under my name, are translations of my papers written in German. I fear I have written them in language difficult to understand. I can conceive of no other explanation of the many mistakes in the translation. Mistakes which distort wholly the meaning of my letter, and give statements of facts of which I know nothing at all. For instance, it is said that Mr. Kilburn, of Littleton, made known to his colleagues of the Berlin Society for the Promotion of Photography, an enlarging process. Allow me to state that Mr. Kilburn, when he was present in our Society, did not say a single word about an enlarging process, and you may know best that he has no enlarging process at all. Further, my remarks in regard to Gutzlaff, are made by the translator to express the opposite to what I said. I

neither said that I followed Gutzlaff, nor that I acknowledged him as my predecessor. On the contrary, I stated that Gutzlaff was not my predecessor, and that his process (making bromide of silver sensible to the so-called non-actinic rays) of shortening exposures by after-exposures has not the least connection with my discovery. Again, we are told Herr Quidde is experimenting with ordinary gelatine plates and azaline plates, etc. I correct this at the request of Mr. Quidde, who states that he has not made comparative experiments with azaline and other plates. The remarks imputed to him were made in the Berlin Society in general by different members, in regard to the two reproductions of new oil pictures of Prof. Menzel, taken with an ordinary gelatine plate and an azaline plate by myself.

On my trip I made very many studies of photographic printing processes, and saw a good deal of interesting matters. For a long while nearly all the processes of photomechanical printing were kept a secret. Now, the veil is raised considerably, and it is generally confessed that it is not the formula, but the ability and the training of the man who uses it which give success. Vienna, I visited one of the oldest and most renowned establishments for photo-mechanical printing-the Military Geographical Institute; that renowned institute whose object is the multiplication of maps, and which has taken so eminent a part in the development of heliography. The situation is excellent, lying behind the imposing new Vienna Court House, and affording a beautiful, wide prospect. There are three stories, two of which form a quadrilateral saloon, whose four angles have side lights of about four metres in width. This adjoins an equally broad upper light. Corresponding to this arrangement there are in the vicinity of the four side-lights four supports for stretching drawings, and opposite these four large cameras, running on tracks. White curtains serve for cutting off the sunlight. But in the third story the sunlight is used with advantage for taking drawings. Here the upper-lights and side-lights can be shoved aside so that the free sunshine may be used upon the drawing. The time of exposure is in the sunlight from eight to ten

times as quick as in diffuse light. posures are made with wet plates. Here one has the opportunity once again to smell the now almost forgotten collodion. Herr Angerer pertinently remarked that the rapidity of the dry plate would serve well for the exposure, but that the subsequent processes in the dark-room, the development, fixing, and washing, demanded too much time. So that with the introduction of the rapid plates no time would be gained but rather lost, in making reproductions. The large plates are laid for preparation on a cross of wood, resting at the centre upon a ball-and-socket joint easily movable by a wooden handle. One man is sufficient to assist the operator with the flowing of the plate. The silvering is done in a large asphaltum receptacle. The plates are immediately fixed after the development, and then subjected to strengthening. The last operation takes place in a second light laboratory by dry light. The plates are fixed after the development, first strengthened with chloride of mercury, then with a solution of gold(1 to 1000), which per litre has a drachm of ammonia added to it. The negative is reproduced partially heiliographically, and partially photographically. The former, by the method devised by the Institute itself, that is, copy upon pigment paper, transfer upon silvered copper, develop next, and impressions by the galvano-plastic. The photo-lithographic process, which is done in an especial establishment, is by a transfer process. Gelatine paper is sensitized in bichromate of potassa, 1 to 30, copied under a Vogel photometer, 16° to 18°, dipped thirty seconds in cold water, superficially dried with blotters, blacked with velvet roller, again dipped in cold water, again dried, again rolled, and finally washed with sponge. The sheet is laid upon the stone and drawn twice through the press. Of special interest to me was the manner of preparing the grain for the heliography by the flowing over of an ordinary negative with collodion in which the carbon powder is suspended in a fine state of division. A large sheet, one of Makart's paintings, done in this manner afforded a good means of watching the operation. At the same time, the Institute make use of an origina1

pigment process of Mariot, and it is made interesting by reason that the transfer process is dispensed with, the picture remaining upon the original bed. The process was most profitably employed for the reproduction of maps. A negative almost a yard in extent was exposed under the black pigment paper, prepared in the Institute, copied under a Vogel photometer to 15°, the paper dipped in cold water, and afterwards sprinkled with warm water. The picture appears in a few minutes, and the ground is washed clean with a sponge.

The process published by Col. Volkmer, as far as concerns the reproduction of engravings, has also lately been applied, with good results, for half-tone pictures. Herr Mariot showed me several very interesting pictures of this kind. The same showed, to be sure, some granulation, but prove the applicability of the process, or predict a new resurrection of the pigment process.

Not less interesting than the Military Geographical Institute was the Photo Establishment of Arger & Gösche, who employ one hundred and forty men, and present a true power of an excellently constituted establishment. This firm prepare only blocks for the printing in a photo-mechanical way. The originals were of different kinds, either drawings prepared on grained paper, made in the establishment in large quantities by brushing over with chalk. These have the necessary grain for phototype reproductions, but then pictures in half-tone must be translated. This grain is effected by after-photography, first the original, then with the same plate a fine setting of various degrees of fineness, or a granular plate is taken, or a transparent granular plate is between, objective and negative. The negative is copied upon colored pigment paper, under control of Vogel's photometer, and this blackened by the known photo-process, and transferred to zinc or stone. The drying is effected by ventilators in a short time. The zinc plate is first planed and polished until it shines like a mirror. The transfer is effected by means of a lithographic press, in the well-known way, and ready for the etching, all the places necessary to be protected with coating of asphalt, and then treated with the

etching fluid, dilute nitric acid. short action of the etching the plate is taken out, and by melting of the superficial layer protected, then further etched. There are about five etchings necessary for a plate. Asphalt dishes are employed, and in a place where the disagreeable vapors may be conveyed off. The plates rest upon gum projections, which afford a ready means of lifting them up and examining them. There is still another thing to mention, that for certain originals which demand a tone for certain spots of the picture, a fine grain is produced upon the zinc plate. This is done by dusting with fine asphalt powder thrown by a duster upon the zinc plate, and then carefully melted, similar to the half-tone process of the heliograph. The zinc plate etched in this manner is cleansed and fastened upon a wooden block of suitable height for printing. There is a special apartment for the preparation of these blocks. Near by is the retouching room for negatives. Further on is the room in which the impressions upon zinc or stone are conveyed, and, last of all, the room for storing the negatives. The most favorable impression of the great establishment was heightened by the excellent order, and the kind regard for the health of the workmen. All the rooms were large and airy, and wellventilated, the foul air drawn off and fresh air constantly pumped in. All operations which evolved offensive odors were done in the digestorium.

Concerning many other things which I saw, I will tell you in my next letter.

H. W. VOGEL.

BERLIN.

THE HELIOTYPE DISPLAY AT THE MECHANICS' EXHIBITION.

One of the smaller rooms of the art gallery of the Mechanics' Exhibition is devoted to the heliotype display of James R. Osgood & Co. Here are to be seen examples of one of the best of the many reproductive processes which have been developed in recent years for the dissemination of works of art among the masses, and in looking at them one cannot avoid being impressed with a feeling of admiration for their ex-

8 fl. ozs.

cellence and with the thought of the great educational power which lies latent in them. The great pictures of the world are here brought out for the enjoyment of all lovers of art in copies faithful to the originals in everything but color, while in some instances even tone and color are suggested in no slight degree. Some of the finest examples of these reproductions, which now number several hundred, are exhibited in this gallery, and it is needless to particularize any as surpassing others in excellence. The reproduction of several of the works of Millet, notably "The Sower," from Maris's etching, will, however, perhaps attract more than ordinary attention. The print not only reproduces with striking fidelity the character and even the feeling of the original painting, but it also preserves all the softness and delicacy of the etching. The examples of heliotypes in color are interesting, but do not seem to us as satisfactory as those painted in black and white. The gallery also contains other examples of work done by this heliotype process. Among them may be mentioned portraits from life, work which, compared with that about it, shows the comprehensive character of the process. There are a number of frames of reproductions of the best pictures in the foreign exhibition of a year ago; an attractive group of theatrical souvenirs, showing the heads of characters in the play "Young Mrs. Winthrop," bills of fare, mercantile cards, labels, bookcovers, circulars, etc., in color, and a fine picture in color of the Parker House extension as it will appear when completed .-Boston Post.

GLEANINGS.

A NEW application of photography consists in imitating the skin of the crocodile by dealers in leather. Briefly, here is the manner of operating. By means of the camera a photograph of the skin is obtained. Such photographs reach us from time from to time from the East. A reproduction is made on bichromatized gelatine, from which a metallic cliché is obtained. This is strongly pressed on calf and other skins, and the result is that they show the mark-

ings of the crocodile skin so exactly that when the operation is finished it is impossible to distinguish, even by experts, between the true skin and the imitation.—

Paris Moniteur.

At the Photographic Society of Leeds, Mr. Wildy made known his process for obtaining prints on ferrocyanide paper. Here is the formula he makes use of:

No. 1.—Citrate of Iron and Ammonia, 81 grains.

Distilled Water, . . . 8 fl. ozs.

No. 2.—Ferrocyanide of Potassium, 50 grains.

Distilled water, . . .

These two solutions are mixed and kept in a black glass bottle in the dark. A paper with a fine grain, but not glazed, is used and the sheets are wet before being sensitized. After sensitizing, drain and dry in a dark room. No more paper should be prepared than is required, as with time it loses its sensitiveness. Expose under a negative until the shadows appear of a strong metallic gray, and the details begin to lose themselves. Wash well in cold water until the drops which come from the corner of the sheet no longer appear yellow. To write on the print, use as an ink a saturated solution of carbonate of soda, and a new steel pen.—Paris Moniteur.

ATTENTION has recently been called to the retarding action of gallic acid used conjointly with a pyrogallic acid and ammonia development (alkaline development). Mr. Wellington submitted this subject to direct experiment. Two plates identically the same were exposed—one, three seconds, and the other, forty seconds. The first was developed with

The second received the action of the same developer and in the same manner, except that thirteen grammes (three drachms, twenty grains) of gallic acid had been added to it. The negatives were absolutely similar in quality, which fully demonstrates that gallic acid exercises a marked retarding action. These results have been con-

firmed by the observations of Mr. Haddon, who, having overexposed certain plates, added a few drops of an alcoholic solution of gallic acid to the developing liquid, and obtained excellent results. It appears that gallic acid possesses a much greater retarding action than bromide of potassium.—

Paris Moniteur.

At the Photographic Society of London, Mr. Debenham said that some photographs of interiors, in which the plates had been very much overexposed, gave superb negatives by means of the retarding action of a strong solution of bromide of potassium, and he asked the question, if, in general, it would not be preferable to expose much longer than usual, and to use in the development a large quantity of the retarding salts? The plates thus obtained have what may be called "the character of a wet plate."

RECENT experiments have shown that gelatino-bromized plates heated to 105° or 110° C. (221° to 230° F.) are much more sensitive than when cold. Messrs. Abney & Schuman have utilized this fact in reproducing the spectrum of certain metals, etc.

PRESERVATION FOR AN UNLIMITED TIME OF A CONCENTRATED STANDARD SOLUTION OF PYROGALLIC ACID.—Mr. Andra gives the following formula:

Distilled Water, . . 110 parts. Sulphite of Soda, . . 12 "

After solution add ten parts of water acidulated with one-tenth of sulphuric acid, agitate and complete by the addition of eight parts of pyrogallic acid. We have here a solution containing one gramme (fifteen grains) of pyrogallic acid for each fifteen cubic centimetres (fourteen fluiddrachms). It is therefore easy to dilute, at the moment of using, so as to make use of it in suitable proportions in regard to the ammonia and bromide used. The presence of the sulphite of soda lessens the color of the negative, and the concentrated solution owes its almost indefinite preservation to the presence of sulphurous acid, resulting from the action of sulphuric acid upon the sulphite of soda .- Paris Moniteur.

ELIMINATION OF THE HYPOSULPHITE OF SODA FROM NEGATIVES .- Mr. Felisch has recommended for removing the hyposulphite of soda from negatives, a bath containing equal parts of iodine and iodide of potassium dissolved in water until it attains the color of port wine. The washed plate is allowed to remain in this bath for a few minutes, after which it is properly rinsed. By this means, it appears, we avoid the destruction of the negative by the badly eliminated fixing-agent. Care should be taken not to prolong the contact, as otherwise the image might be converted into an iodide of silver, which would change the value of the negative.—Paris Moniteur.

ALLOY FUSIBLE AT 160° FAHR.—Prof. Gutherie has just discovered an alloy which melts at 160° F., and which consequently can easily be used for making moulds from gelatine reliefs:

Bismuth,			47.38	parts
Cadmium	ı,		13.29	66
Lead,			19.36	66
Tin,			19.97	66

RESTORING DISCOLORED PHOTOGRAPHS.

—World and Science gives the following process for removing the yellow color of old photographs: Plunge in a diluted solution of bichloride of mercury until all trace of the yellow disappears. It is not necessary to remove the print from its mount, but in this case, place on it a sheet of bibulous paper which has been steeped in the bichloride. The print thus treated becomes more brilliant, and it is asserted that the image is more permanent, being less exposed to change in the whites, and the loss of details.

THE Moniteur de la Photographie calls attention to the beautiful print in the Photographic News, made from typographic blocks furnished by Crosscup & West (Ives's process). The editor remarks that this process has been improved. The continuity of tone, owing to a closer network, is almost complete, and the general appearance very pleasing.

THE British Journal publishes a patent for obtaining a flexible support to be used

instead of glass plates. A paper of suitable thickness is rendered translucent by an immersion in copal varnish. When dry it is polished with powdered pumice, coated with soluble glass, and then rubbed with ox-gall. The editor of the journal says that the paper gives a smoothness equal to that obtained with glass.—Paris Moniteur.

REDUCING THE INTENSITY OF NEGATIVES.—We read in *Photography* that Mr. Martine has remarked that if an intense negative is allowed to remain for half a day in a mixture of two parts of the ordinary solution of hyposulphite with one part of fresh solution of the ferrous oxalate developer, all traces of the image disappear. It is therefore possible, by using a mixture of hyposulphite of soda and ferrous oxalate, to obtain the gradual reduction of negatives that are too intense.—

Paris Moniteur.

ANATOMICAL PRINTS .- Mr. Pinard, photographer of the School of Medicine at Nantes, France, laid before the Photographic Society a painting made on a photograph representing an interesting anatomical subject, and two platinum prints representing another anatomical reproduction. Mr. Pinard made the painting in the following manner: He first photographed the subject life-size by the silver gelatino-bromide process, and from this he made a positive print by the carbon process, selecting the sepia tint, which is that generally adopted by painters for their backgrounds. This positive image was developed on a temporary support. On the other hand he took a painter's canvas mounted on a frame; after having rubbed the surface with a clove of garlic, which, it appears, entirely removes the grease, and after having well washed it in water, he covered it with a coating of gelatine, to which a little chrome alum had been added. On this coating he made the final transfer of the image. The canvas was then floated for twenty minutes on an alum bath, about five per cent., then well washed under the tap, dried, and stretched. The photographic image thus fixed on the canvas is ready to be painted in any manner that may be desired, either by glazing or impasting. The other two anatomical prints sent by Mr. Pinard, had especially for an object to draw the attention of photographers to the facility offered by platinum printing when rapid execution is desired. The object to be reproduced, brought at 9 o'clock in the morning, was immediately photographed upon a gelatino-bromized plate. The negative, well washed and dried with alcohol, gave off platinum prints which, as had been requested, were washed, dried, mounted, and delivered at four o'clock in the afternoon; this would have been difficult to do by the silver process. These prints offer besides, a probability of preservation which silver prints do not possess.—Paris Moniteur.

SPECIFICATION OF THE PATENT OF MR. W. WINTER .- The object of this invention is to reproduce photographic enlargements on tissues made from cotton, silk, linen, and wool, by using preparations of iodide or bromide of silver. My process consists essentially in impregnating the tissues used for receiving the image with iodide or bromide of silver, and in impregnating them I render them insensible to light, and with which I can obtain with a photographic negative of sixty square centimetres (ten square inches), enlargements exceeding sixty thousand square centimetres (ten thousand square inches). By using electric light this may be done in from one to four minutes. To proceed with precision, I will mention the proportions that I use in a temperature of from 20° to 30° C. (68° to 86° F.) with textures of cotton, fine or medium, or of wool, in obtaining results particularly fine and certain. The tissue used, before being prepared, should be freed of all injurious chemical substances, and then treated as follows:

1. Application of the bromide. The tissue is impregnated with a solution composed as follows:

So that is equally wet on both sides, and it is then hung up to dry.

2. Application of the silver. The tissue, when dry, is in the same manner plunged into a solution composed of

Nitrate of Silver, . . 4 parts. Nitric Acid, . 1 part. Water, . 140 parts.

- 3. Exposure to light. I use an electric appliance and proceed in other respects in the same manner as with the solar camera. The sensitized tissue is exposed until the image appears clearly visible, which is obtained in from one to four minutes, according to the size desired, and the strength of the negative.
- 4. Development. Make a solution in a flat dish of suitable size, of

Pyrogallie Acid, . . . 10 parts. 45 " Citric Acid. . 410 Water,

In this solution the image is plunged and allowed to remain until developed to the required strength.

The other manipulations are similar to those used in ordinary photography. Wash well the image after development, and treat in the ordinary way with a gold solution; then fix, and finally wash again in abundant water .- Journal de l'Industrie Photographique.

A PHOTOGRAPHER of Berlin has been sent to the penitentiary for a fraud which would probably entitle him to be called a "smart" man in this country. He pretended that he could make photographs of gentlemen so life-like that their dogs would be able to recognize them. When the photographs were held up before the dogs of the owners, the dogs would wag their tails and lick the pictures. The other photographers of Berlin grew jealous. watched their colleague and finally discovered that he put a thin layer of lard over the picture, which the dogs, of course, smelled, and then licked off.

Photographic Novelty. - Uranium photography is becoming popular in France. The salts of the metal are gold, green, and greenish-brown, and in thin layers produce very delicate tints. For photographing forests and landscapes they are superior, giving pictures that are nearly perfect reproductions of nature.

A DISCUSSION ON PRICES.

(Continued from page 284.)

IX.—To be Continued until there is A REFORMATION.

A reformation has arrived or is coming. Witness the following:

ROCHESTER, N. Y., September 30, 1884. EDITOR PHILADELPHIA PHOTOGRAPHER:

The photographers of Rochester organized a

meeting this evening, with Mr. J. H. KENT in the Chair, and agreed to advance their prices on cabinet and card photographs one dollar per dozen. Good feeling exists among the fraternity and all present expressed themselves as anxious for a still further advance as soon as the public are accustomed to the step just taken.

S. D. WARDLAW, Secretary.

Good for Rochester. The sound of reform is started now-may the good work continue throughout our whole land. This is the right method; a gradual, steady, but certain advance. We think our arguments in favor of increased prices for photographs are doing their good work, and we can only add that if photographers would now purchase and distribute among their patrons the little leaflet we have published called A Quiet Chat on Prices that the way for advance would be made so easy that it may be done without scarcely being noticed. A little backbone, gentlemen and ladies, is all that is needed in this direction, and you will be astonished and pleased at the results.

In the little pamphlet entitled A Quiet Chat on the Prices of Photographs, we have already recorded the names from twenty-four States, of those photographers who rightly believe that good work of necessity demands a fair compensation; now we are glad to add the voices from nine more States and Territories. The cheap man is beating against the natural laws which govern production and value, and must supinely drop, like all fools who fight against natural laws. A distinguished English photographer has said the great bane of our art has been the "cheap," combined, as it proverbially is, with the nasty. Cheap photographers may depend upon it that the public does not value them above the price they put upon themselves. If photographers want to compete with their opponents, let them compete by all means. Let them utterly crush them if they like, but let them do it by skill in their art, not in the lowness of the prices they charge for their productions. We call upon the

cheap men to make an effort to begin to study their art from a new position, to determine to excel the best, and above all, when they have done this, to charge a good price, and give them their money's worth.

SOME PLAIN TALK .- What do we notice in the photographic journals of to-day? One of the prominent topics that agitates the photographic mind is price. Photography having been terribly convulsed for some years past, is now awakening to the fact that something must be done for the financial part of the business, or those who persist in the downward course must eventually go to the wall. As a sample of what is said in the journals, we clip the following from The Philadelphia Photographer of last month, by the pen of John K. Miller, of Elizabethtown, Pa.: "The public never demand low prices for good work: only a certain class, never of much good to most galleries, twist the life out of the eagle on a twenty-five cent piece. Ask some of the Harrisburg, Pa., photographers what they think of cutting prices, and they will show you a scar on their reputations' fingers deeper than silver stains. Their pocketbooks have the dyspepsia or marasmus bad enough, and no doctor but that of experience could do them any good, and, fortunately or unfortunately, that doctor is of the "old school," and believes in physic.

Some More Plain Talk.—Dress your hair and arrange your toilet about your neck just as you wish to appear. Avoid all strong contrasts of black and white, dress with taste, and your portrait will always look well. Please remember that I have not the physical or financial ability to try experiments on your various toilets, unless you are willing to pay for the extra sittings. It will be to your advantage to leave your position to me, unless you are the better educated in art; then I will gladly defer to your superior judgment. Under all circumstances I will endeavor to please you, and to give the very best possible result in position, lighting, expression, and finish. My prices are more than moderate for the class of work I give you, and I trust you will acquiesce in my business rules.

All work is finished as rapidly as possible; there are no unnecessary delays.

C. TOMLINSON, Elmira, New York.

We endorse the above as a move in the right direction to secure good work to the patron, and pay to the workman.

M. H. ALBEE, W. F. KUHN, L. SPEAR. -Marlboro, Mass., Paper.

THE REPORT OF THE TREASURER OF THE PHOTOGRAPHERS' ASSOCIATION OF AMERICA.

BELOW we append the official report furnished us by Treasurer Armstrong of the Photographers' Association of America. Our readers will find many new items and names on both sides of the account. Some of them are difficult for us to understand, but we well know the difficulties of managing such exhibitions, having been through the mill a good many times, and we know, too, how very easy it is to find fault. It is always for the ignorant to find fault. gentlemen having charge of the late Convention were appointed to the trust, and it is our duty to accept what they consider is the best they can do, with no howling or grumbling. We think, however, that a little more care could have been exercised in a matter which certainly should have had the utmost care, namely, in managing the amount of money which was received from contributors. The item "extra collections by Secretary \$1845.00," does not fill the bill; each individual who contributed to this matter should be mentioned by name as a matter of common courtesy. We speak what we know, when we state that at least one party was neglected in this way. We refer to the Blair Tourograph and Dry Plate Co., 471 and 475 Tremont Street, Boston. They received from Mr. Weingartner, Secretary, under date of June 11th, a bill for half-page advertisement in book \$10.00, and \$50.00 subscription to fund, total \$60.00 with the following note appended:

"Please remit, and I will send receipt.
The Convention is booming. Let me know

how much space you want. How do you like the book? How many railroad certificates do you want, and on what railroad will you come over.

"Yours fraternally,
"Leo Weingartner,
"Secretary."

This letter was answered by a check for \$60.00; and, as we have said, no careful record was made of it, so as to see it properly acknowledged. We have no further comment to make, except to say that our motive is only to ask our friends to be courteous in all matters. The Blair Tourograph and Dry Plate Co. do not hold themselves up as models of charity, but we think and they think they are entitled to credit for what they do if other people get it. Below we append the report:

THE PHOTOGRAPHERS' ASSOCIATION OF AMERICA.

Annual report of W. A. Armstrong, Treasurer of the Photographers' Association of America:

Receipts—1883.

Oct. 24, cash from J. H. Reid .	\$497.30
Nov. 1, cash from C. A. Schindler	10.00
1884.	
June 12, cash from A. M. Collins	
& Son	100.00
June 12, cash from E. & H. T. An-	
thony	100.00
Aug. 1, cash from—	
Scoville Manuf 'g Co., N.Y. City	100.00
W. F. Ashe	25.00
Lehman & Brown	25.00
Mr. Schofield, Utica, N. Y.	10.00
S. Wing, Charlestown, Mass	10.00
Benjamin French & Co., Boston	50.00
C. M. French, Garretsville, O	10.00
Mr. Cope, Hamilton, O	10.00
Toledo Moulding Co., Toledo .	25.00
E. C. Gilbert, Ravenna, O	5.00
P. Smith & Co., Cincinnati, O	50.00
Mr. Grayback, La Porte, Ind	25.00
J. M. Bryant, La Porte, Ind	25.00
Allen Bros., Detroit, Mich	25.00
Rockford D. P. Co., Rockford, Ill.	50.00
N. C. Thayer & Co., Chicago, Ill.	25.00
Douglass, Thompson & Co., Chi.	25.00
Carried forwards,	\$1132.30

Brought forwards	s, \$1132.30
Mallinkrodt C. Co., St. Louis, M	[o. 25.00
St. Louis D. P. Co., St. Louis	. 25.00
A. L. Seward	. 5.00
Devoe & Co	. 25.00
Extra collections (by Secretary	y). 845.00
Dues from members For lumber and screens .	, 70.00
Sept. 1, cash from C. A. Schindle	
Hoboken, N. J	
Sept. 8, cash from memb'ship du	es. 2.00
1	
Total	\$3,792.30
Expenditures—1884.	
April 16, paid J. H. Kent for Se	ec-
retary	
Expenses of Executive Committ	
called to Cincinnati in April	
April 30, paid for blank books	
Aug 1, paid—	
Mr. Bonte's carpenter bill .	. 400.00
For sign	. 15.00
Mr. Cady	. 100.00
For badges	. 200.00
For clerks	. 20.00
For printing posters	
L. Weingartner (clean'g build	
(Bills audited at Cincinna	
Paid L. Weingartner—	201)
Five per cent. of receipts .	. 188.87
Music	, 90.00
Plants	. 10.00
Muslin for decorations .	25.00
CI 9 433	. 17.00
Gas bill	. 500.00
Stamps, telegraphing, station	
ery, and E. Klauber's e	
penses on committee's call	
Rent of awning	40.00
Reporting proceedings .	. 175.00
Paid draft on New York .	1 05
	20
Paid exchange on draft Paid C. Gentilé, advertising .	. 40.00
Paid J. F. Ryder, advertising	
Paid on President's and Secr	
tary's vouchers	. 661.75
Paid W. A. Armstrong 5 per cen	
of receipts	. 188.76
·	\$3,200.86
Total	591.44
To balance in bank	_
	\$3,792.8

SOCIETY GOSSIP.

PHOTOGRAPHIC SOCIETY OF PHILADEL-PHIA .- Minutes of the regular meeting held Wednesday evening, October 1, 1884, Mr. John C. Browne in the Chair.

The Chairman announced the death of Mr. James L. Claghorn, which occurred August 25th. Mr. Claghorn's name was the first enrolled upon the original list of members of the Society. With his wellknown interest in all matters pertaining to art, he had been, particularly in the early days of the Society, very zealous in promoting its welfare. His loss was one for which all must feel a most sincere regret.

Dr. Jordan, on behalf of Mr. I. W. Taber, of San Francisco, presented a fine large photograph of El Capitan, Yosemite Valley, taken on one of Mr. Taber's 18 x 22 dry plates. The beautiful quality of the picture was greatly admired, and a vote of thanks was passed for the gift.

A discussion on instantaneous photography was participated in by several members. Dr. Jordan had found the light better at Mt. Desert than in either Florida or California.

Mr. Carbutt described the shutter used in taking the picture of a bicycle being ridden down the steps of the capitol at Washington. The slide, with a pear-shaped opening, worked with a rotary motion from side to side. It was made of wood soaked in paraffine, and rubbed with plumbago to reduce friction. The necessary speed was attained by a rubber band having a pull of six pounds.

Mr. Croughton mentioned the beautiful results obtained with the Edwards (English) shutter, which was in the form of a curtain with a narrow slit passing downwards directly in front of the plate.

Mr. Smith showed an instantaneous picture of a horse and sleigh taken by Mr. Herzog, in which the action of the horse was wonderfully well shown, the feet being in a position such as is generally accepted by artists as correctly representing the impression on the eye.

Mr. Corlies showed a group of tennis players, in which three balls were taken in midair with remarkable success.

A number of pictures were shown by Mr. Wood, among which may be mentioned a very life-like instantaneous view of "Schoolboys at Play."

Mr. Frank Bement showed a number of views taken at Lake George.

Dr. Lowenberg asked the question, "What is the equivalent focus of a lens, and what use is made of it?"

Mr. Carbutt stated that in a rough way it could be considered the distance from the ground-glass to the diaphragm when the lens was focussed on a distant object. The exact equivalent focus was one-quarter the distance from the ground-glass to an object so situated that the image on the groundglass, when in sharp focus, was exactly the same size as the object itself. In practice it gives a means of comparing the working of one lens with another. Two lenses using stops whose diameters bear the same proportion to the equivalent foci of their respective lenses, will require the same exposure though the lenses vary greatly in size. Thus a lens of six-inch focus with a one-half inch stop $\left(=\frac{F}{12}\right)$ will require the same exposure as one of twelve inches focus with a one inch stop $\left(=\frac{F}{12}$ also, $\right)$ the diameter of the stop in both cases being

one-twelfth of the equivalent focus.

In order to proceed with a lantern exhibition of pictures by Mr. Wood, the meeting adjourned. ROBERT S. REDFIELD,

Secretary.

PHILADELPHIA AMATEUR GRAPHIC SOCIETY .- The beautifully arranged reception-room of the Philadelphia Amateur Photographic Club accommodated a goodly attendance of the regular members, and also several visitors.

The President, Mr. Roberts, called the meeting to order, and the Secretary read the minutes of the last meeting, which met with a few objections, but were finally adopted.

It seems that the Society had agreed to subject several different brands of dry plates to certain tests, and had appointed a committee to decide upon their relative merits.

Dr. Lowenberg, as Chairman of this committee, was invited to give the report of the experimental tests. He desired to preface his remarks by saying that the Society wished it to be distinctly understood that the experiments were not made with any design of furthering the interests of any plate-maker, but solely for the good of the members, to save them the mortifying results as well as expense, which some incurred with the use of plates not adapted to the special work intended.

Dr. Lowenberg continued his remarks and explained the method of procedure. Several well-known brands of gelatine plates were taken of professed rapidity and used upon instantaneous exposures, under exactly the same conditions with the various drop-shutters, and with Darlot No. 1, 2, and 3, and Ross Wide Angle Instantaneous. Six plates of each brand were used, and, as Dr. Lowenberg affirmed, the experiments were conducted accurately and in a scientific manner. The results were in favor of Carbutt's special plates, which gave the clearest and most vigorous negatives, and the greatest detail in the shadows. Good results had been obtained by one experimenter with the Inglis plate.

The English brands of Wrattan and Wainwright and Kingston plates were last upon the list. Many of the members objected to the value of this report as an indication of the merits of the plates, and claimed that the tests had not been conducted scientifically. The Wrattan and Wainwright and the Kingston plates had been used by them, and had given most excellent results.

It was thought the mere fact of placing such plates as those of established excellency and of undoubted merit last upon the list was a sure indication that the experiments had been conducted in an unscientific manner. It was agreed that a further test should be made; the plates to be exposed, and then sent to the makers themselves for development.

The resignation of Mr. Pearson as Secretary was accepted, with the regrets of the Society at his retirement. Mr. Randall was appointed to fill the vacancy.

A letter was read by the Secretary from Mr. Beach, President of the New York Society, asking the coöperation of the Club in representing amateur photography at the great Exposition at New Orleans.

Mr. Walmsley, Jr., exhibited a number of drop-shutters, and also a very ingenious washing apparatus, by which the constant change of water was secured, and the hypothoroughly eliminated from the print.

A test of the various magic lanterns was made—French, English, and American. Hughes's, of English make, and J. W. Queen's, of Philadelphia, were acknowledged to be superior to the others in illuminating power, and distinctness of the image projected. E. L. Wilson's were not tried.

A number of excellent slides, made by the members themselves, or from their negatives by professional slide-makers were shown.

Many excellent prints from negatives, the work of the members themselves, were shown; noticeably those by Messrs. Randall, W. D. H. Wilson, Getty, Taylor, Cunningham, Van Beil, Gray, and Dr. Lowenberg.

On motion, the Society adjourned.

Association of Operative Photographers.—September 3, 1884, 392 Bowery. President Buehler in the Chair. Minutes of last meeting read and approved. The thanks of the Association were returned for the various journals received.

Mr. McGeorge introduced to the Association Mr. Moreno, as follows: Mr. Moreno came here to night at my solicitation. He has the misfortune not to hear much, and is not able to speak our language, but he has the good fortune to turn out some very fine work. It must be encouraging to see that a person laboring under such disadvantages can do work worthy of any one. Mr. Moreno is an employé as well as an employer—an operative photographer, as it were, for he does his own work.

Mr. Buehler: Here are pictures from plates that have been fogged; not light-struck, but made with foggy emulsion. Mr. Moreno, by his process, which was published in the *Bulletin* for August, has been able to clear them.

Mr. McGeorge: Two of these prints represent—one fifteen years' experience with

the wet plate, the other fifteen minutes' work with the dry-plate process.

Mr. Buehler: With any good emulsion a dry-plate negative can be made for the first time by an expert operator. These are all made on Eastman plates. In this picture of the same lady taken twice on the one plate, a mask was cut sufficient (illustrating) only to show this part. The mask was put right in front of the sensitive surface, and that was first exposed. It opened like a flap, and closed again, and the person changed position. It is very ingenious. The exposures have to be made as near alike as possible in order to avoid a dark line where they join. Mr. Moreno has succeeded in getting four exposures on an imperial plate -one person changing position four times.

Mr. McGeorge: I have done what little I could to further the interests of the Association, in the hope of filling the gap caused by the resignation of several of its best members. Mr. Duchochois, who is an old chemist as well as an old photographer, and probably knows as much about photographic chemistry as any one in the city, has generously offered to give a course of lectures before the Association, in a popular way, explaining inorganic chemistry and chemistry as applied to photography. Mr. Duchochois has been a chemist all his life, and if I may be permitted to say it, it has been his aim to discover and reveal a process of photography in colors, in which he partially succeeded at one time. I have no doubt his words will be of interest to many of the younger photographers, at least to those who have not had an opportunity of becoming familiar with the subject elsewhere.

Mr. Buehler: You have heard what Mr. McGeorge has brought before the Association, and I can only heartily welcome the gentleman, and would like a motion made conveying our thanks to Mr. Duchochois.

The motion was made, and carried.

The Secretary: I move that a vote of thanks be given to Mr. Moreno for kindness in coming here this evening with his fine collection of negatives and portraits, and also for the information he has given us about fog. I hope he will soon learn to speak English, and attend our meetings often. Carried.

Mr. McGeorge: I desire to see some day that line which has hertofore existed between the employer and employé obliterated. I hope the time will soon arrive when every employé will be at once his own employer and his own employé.

Mr. Buehler: If the photographic employers would acknowledge the work of each department—the work of the operator printer and retoucher—there would be a great deal better feeling between them.

Mr. Hickle, printer for Rockwood, exhibited some very excellent work of steamers passing up the Sound, made with Anthony's twelve-dollar camera. T. W. POWER,

Secretary.

A NEW AMATEUR SOCIETY.

COLUMBUS, OHIO, Oct. 16, 1884

DEAR SIR: About a dozen amateur photographers of this city, on October 13, met and organized the Amateurs' Photographic Club of Columbus, Ohio. Prof. W. S. Goodnough was elected President, Mr. Will H. White Secretary. The meetings will be held semi-monthly. Several of the members are old workers, one or two commencing in wetplate times, and two are Professors of Science in the State University. On this account the discussions will be of value, and cover a wide range of topics. Best hopes for them. Yours,

W. S. GOODNOUGH,
President.

At the recent meeting of the American Association for Advancement of Science, held in Philadelphia, several papers on photographic subjects were read. Professor W. H. Pickering exhibited spectrum photographs of the infra red rays upon ordinary commercial dry plates of different makers. Gelatine plates are ordinarily regarded as proof against red rays, and yet in this case the rays below the red in the spectrum that are invisible as light impressed the plate. This has been done with expressly prepared plates by Abney, Vogel, and others. It is only necessary to say that the spectrum photographed by Professor Pickering was very short-perhaps an inch and a half long; and that, with greater dispersion, so much longer time would have been required that no impression would have been made by the red rays. Professor Rowland remarked, upon rough calculation, based on the time employed by Professor Pickering, that it would take 1000 hours' exposure for the spectrum of the dispersion given by his grating.

Professor Pickering also read a paper, giving the results of his experiments upon the sensitiveness of different brands of dry plates in the market.

A NATIONAL AMATEUR CONVENTION.

BY PROF. CHAS. F. HIMES, PH.D.

THE suggestion made by me to you several months ago, in regard to the combination of the various Amateur Photographic Associations of the country, and which found its way into print inadvertently, has been so promptly responded to, and so well seconded by Mr. Beach, President of the New York Amateur Association, that its ultimate success may be regarded as certain. The best plan will doubtles develop itself upon conference, by correspondence or otherwise, of the different Associations. My own original suggestion did not contemplate an entirely new and independent National Amateur Organization, but a closer relationship between existing Amateur Associations, through an organization that would recognize a sort of ad eundem membership in all. It would not need elaborate machinery, and some Amateur Society might be appointed from year to year as an Executive Committee, with power over all minor details. The profit and pleasure to be derived from a frequent informal interchange of suggestions, of work supplemented by the amateur camera-meets that might be arranged from time to time, would be incalculable. Feeble associations not only would be encouraged, but some of the stronger ones might be carried through the dead-point of some accidental depression that might prove fatal, as has often happened to similar organizations. A business meeting of the National Organization need only necessarily be a representative meeting of a limited number of delegates from each. As a member of one of the earliest and most effective amateur organizations of twenty-five years ago, which was not at all of a local character, as all our amateur organizations now are, I cannot but realize how much is lost by the absence of some bond of connection, however slight, between amateurs of widely separated localities.

PHOTOGRAPHIC MOSAICS FOR 1885.

Soon after our readers see these lines the twenty-first issue of Photographic Mosaics will be ready. It is not in taste for us to make more than this announcement. have expended more than usual effort to secure not only filled pages for Mosaics, but to fill it with matter from our best practitioners of a quality that will tell every line to somebody. The past year has been an unusually fruitful one for photography, both practically and æsthetically-a year of the greatest growth in our art of any of its life. Although our magazines have all teemed with excellent contributions, keeping the photographer well posted as to photographic progress, still there remains a vast amount of useful experience that is bubbling up to the surface all the time, and which the editor of Mosaics endeavors to catch and arrange in pleasant and profitable form for those who are devoted to the art. We trust, therefore, that Mosaics, 1885, will not only prove to be new to the most of our readers, but acceptable and useful in helping them over difficulties, and in making the art of photography pleasanter to them. The great charm about photography is that it not only gives pleasure, but enables us to give pleasure to others by the products of our cameras. Mosaics will add to this pleasure just as sure as it is carefully read. We refer the reader to the partial list of the articles it contains, in the advertisement in proper place. There is something marvellous in the thought that 144 pages of condensed photographic matter can be supplied for the low price of fifty cents. Cloth bound copies are, as usual, one dollar.

HONOR ACCORDED A PHOTOGRAPHER.—Our oldtime subscriber, Mr. WILLIAM MYLES, of Wheeling, W. Va., has been elected a member of the Legislature of that mountainous State, by a large majority.

OBITUARY.

HENRY T. ANTHONY.

New York, October 11, 1884.

"E. L. WILSON, Philadelphia:
"Our Mr. Henry T. Anthony died this morning suddenly.

"V. M. WILCOX."

The above telegram was received by us early on Saturday, October 11, informing us of the death of one of the most useful men that ever was known in the photographic art. Only three days previous to the receipt of this sad news, Mr. Wilcox, with several other gentlemen, was in our office as a committee to see that photography was properly represented at the New Orleans Exposition. One of the gentlemen of this committee was Professor Charles F. Himes, who was also one of our earliest amateur photographers. While discussing that department of the committee work which referred to photographic history, the subject of fuming was broached, and the name of Mr. Henry T. Anthony with his invention mentioned, whereupon Professor Himes revealed a little bit of history that was new, to us at least, and we imagine to the rest of the committee, if not to most of the photographers who are to-day living. Professor Himes stated that during an early meeting of the old First Exchange Club, of which he was a member, Mr. Anthony communicated to them his discovery of the advantages of fuming. Among those who received this secret was Professor Edward Emerson, also a member of the club, and now resident in Munich, Bavaria. Professor Emerson, with all the enthusiasm of an earnest amateur, communicated Mr. Anthony's discovery to The British Journal of Photography, and thus the fuming process became first published in England. This publication has since been set against Mr. Anthony's claims as the real inventor of the fuming process on several occasions. This fact being made known to Professor Himes, he stated his resolve to communicate what he knew to Mr. Anthony, and thus confirm him in his claims. Alas! before Professor Himes could return to his home and pen his communication, the news comes, first that our friend is very low, and then that he is dead. Who is not familiar with the name of Henry T. Anthony? Where is the photographer who can boast of ten years in the art, and who has ever met Henry T. Anthony, who can say that he has not learned wisdom from his teachings? Not only as the editor of Anthony's Photographic Bulletin since its conception, but as a free giver of knowledge, Mr. Anthony has been one of our most useful men. Early in our editorial life he became our personal friend, and many happy hours have we spent with him in his "den," as he was pleased to call it, watching his experiments, learning from his investigations, and listening to his dis-



cussions upon his theories and matters of practice. When the National Photographers' Association was formed, Mr. Anthony became, year after year, an attendant upon its Conventions, and there went about dispensing information to the fraternity, many of whom will have cause to remember him gratefully. Another strange coincidence is, that just before the news of his

death came, we received in our mail the issue of The British Journal of Photography of September 26, containing a sketch of Mr Anthony's life, together with his portrait. As the British Journal puts it, "an admirable likeness of a cultured and worthy gentleman." On our cover will be found another portrait of Mr. Anthony, though all American readers have been made familiar with his face by his portrait in The Bulletin. Mr. Anthony was a little past seventy years of age, having been born Sept. 18, 1814. He was a graduate of Columbia College in New York, and was, in turn, a civil engineer, employed upon the Croton aqueduct, and upon various public works of New York State. He was also a bank clerk for a portion of his time, and otherwise employed until, in 1852, he assumed the manufacturing department of the great photographic stock-house of Edward and Henry T. Anthony.

Photography never had a more devoted votary than the subject of our notice. His familiarity with the sciences enabled him to grasp fully and widely every bit of material which came to his hands on the subject of his own art, and enabled him to apply it practically to the services of the fraternity. Being in charge of the manufacturing department, he produced many specialties for the photographer which are as familiar as household words in the dark-room. It will be a long time before our art can discover one able to take his place. The Bulletin will have no difficulty to secure an editor with much photographic knowledge (though never as a beloved brother). But no one can take the place of Henry T. Anthony, who, seated in his private office, led many a photographer from darkness to light; lifted him up from the rut, on to the smooth and easy road, excited his ambition, and made him produce better results in spite of discouragements. He was a photographic dictionary, cyclopædia, and textbook combined, and the mere indication of a desire to gain information was sufficient to cause these great volumes, which in him were combined, to open freely and fully to all who needed them.

To his remaining partners, Messrs. Edw. Anthony and V. M. Wilcox, and to their

great staff of employés, we tender our cordial and heartfelt sympathy. How we shall miss him when we next visit his wonted place of business! But how much more severe will be their bereavement and deprivation, because it must daily come to their minds; but the familiar form will no longer be seen walking in and out among them.

The following was issued by the Photographic Merchants' Board of Trade:

Office of the Secretary of the Photographic Merchants' Board of Trade.

Detroit, Mich., October 11, 1884.

Dear Sir: A little more than a year has elapsed, and death has a second time entered our ranks: Henry T. Anthony is dead. A veteran in years and service has passed away. His reputation has gone beyond the narrow limits of our Association, beyond our own land, making for him a respected and honored name wherever the art of photography is known. The following telegram announcing his death reached me today:

New York, October 11, 1884. GEO. R. ANGELL, Detroit:

Henry T. Anthony died this morning at seven o'clock.

E. & H. T. ANTHONY & Co.

I mail this to you with regret. Fraternally yours, GEO. R. ANGELL,
Secretary.

FILM NEGATIVES.

On page 198 of our issue for July last, after discussing "a perfect negative process," we closed our remarks as follows: "One revolution precedes another, and it is quite possible that the gelatine plate is only paving the way for a more perfect negative process."

We little thought then, that in less than a third of a year, any one of our bright and successful American manufacturers of gelatine emulsion plates would enter our office able to cry "Eureka!" But we are happy to say that such is the real fact, and some of the results are at our good right hand while we drive our stylo across the sheet.

While many another ingenious plodder has been experimenting with gelatine sheets and translucent paper, reviving the old Talbotype process, or treading on the heels of the manufacturers of carbon tissue, one of our advertisers has turned aside from all makeshifts, and, as we suggested, has attacked the conundrum in an entirely different direction, and met with the succes he deserves.

The gentleman we allude to is Mr. George Eastman, of Rochester, N. Y. Mr. Eastman's product is an *emulsion film* supported on paper or its equivalent, and is to be supplied to the purchaser either in "endless" rolls, or in "blocks" of a dozen or more sheets together, flat and compact.

We are hardly called upon to go into the details of the manufacture of these films, for the possible processes are various. The paper could be coated by flowing with a brush or dabber, or it could be made to pass over a vessel of emulsion and take up on its way sufficient of the fluid emulsion to suffice.

Given the "film," what concerns us most is how are we to make it available?

First a word or two more of explanation. Were the paper or other support simply coated with sensitized emulsion, there would be no profitable way of utilizing it for negative purposes. Refer to the diagram which follows, and this fact will be made plain. A, is the support; C, is the layer of emulsion; and B, is a gelatine layer which comes in between for a purpose which will be found necessary when the method of using the film is further explained.



The construction of the film is now understood, and we expose it in the camera. It is developed and fixed as though it were on glass. After being thoroughly washed, the film is detached from the paper in the following, or in some equivalent manner:

The fixed and washed film is floated face downward in water, and a glass plate being introduced under it and lifted out of the water, the plate will lift the film with it, which is then made to adhere closely to its surface by pressure on the back of the paper. The adhesion is preferably secured by the sliding pressure of the edge of a

straight piece of rubber or other flexible substance carried along the back of the The application of the pressure should be repeated until contact is secured at all points by the entire removal of the water between the glass and the film. The paper support is now detached from the film by the application of the requisite degree of heat to the glass plate, the effect of which is to soften the gelatine layer between the paper and the relatively insoluble gelatine layer containing the image, so that the paper may be readily stripped off or removed, leaving the image adhering to the glass. The heat may be applied uniformly by placing the glass on a heated plate of metal, or on a water bath, or by the application of hot water to the plate. Any remaining traces of the soluble gelatine layer may be sponged or washed off with warm water, and the glass and adhering film, when dried and varnished, if desired, is ready for the printer.

By the use of wax on the glass or other support, the film may be stripped and used or preserved independently. Thus the glass having been coated with beeswax dissolved in turpentine, and subsequently polished, the gelatine image may be removed therefrom by applying a moist gelatine sheet to it and allowing it to dry, after which the two gelatine sheets may be removed together from the glass or other support, and may be subsequently used to print from, or mounted, or preserved in any preferred manner.

The operations may be performed in different order. Thus, the paper may be stripped from the film before development or after development, and before fixing or after fixing.

We ought to have said as to the gelatines in the composition of the gelatine layer C, and the emulsion layer B, that the last is less soluble than the first (though both are insoluble in cold water), because of the addition of chrome alum, and is rendered so in order that it may be transferred to glass or entirely detached from any support, if preferred, as described above.

The matter will be made still plainer to our readers if we quote the claims of the inventor from his patent specifications: "I claim:

"1. As a new article of manufacture, a sensitive photographic film consisting of a coating of insoluble sensitized gelatine, a paper or equivalent support, and an interposed coating of soluble gelatine.

"2. In a photographic film, the combination of the support A, the insoluble sensitive gelatino-argentic-emulsion film C, and the soluble interposed gelatine layer B, substantially as described.

"3. In a film for photographic purposes, the combination of a backing sheet or support of paper or like material, a film of sensitized gelatine adapted to withstand the solvent action of water, and an intermediate film of soluble gelatine.

"4. The herein-described sensitive flexible photographic film, consisting of the support A, having a layer of insoluble sensitized gelatine C, attached thereto by means of an interposed soluble gelatine substratum, said film being rendered flexible by means of glycerine, substantially as described.

"5. As an improvement in the art of photography, the process consisting in, first, providing an insoluble sensitive gelatine film affixed by solvent material to a supporting-sheet; second, in exposing and developing said film; third, attaching the developed film to a rigid plate by means of wax or its equivalent; fourth, in detaching the support from the film by the application of heat; and, fifth stripping the film from the waxed surface.

"6. As a new article of manufacture, a sensitive photographic film composed of a paper or equivalent support, an insoluble sensitized film, and an intermediate soluble attaching-film insoluble in the developing-fluids, and at normal temperatures, but rendered soluble by the application of heat in watery solutions, substantially as described.

"7. As a new article of manufacture, a sensitive photographic film composed, essentially, of a paper or equivalent support, a film of sensitized gelatine, and an interposed attaching-film, the said sensitized film being insoluble, and the said intermediate attaching-film being insoluble with respect to the developing-fluids, but rendered soluble in water by the application of heat, substantially as described."

When Mr. Eastman was working the process described above in connection with his friend and partner, Mr. William H. Walker, they found that when the support was coated on one side only, the coating would swell from the absorption of water during the various stages of development, and the films would consequently manifest a tendency to curl backward. Patient experiment revealed the fact that this annoyance could be overcome by giving the support a coating of gelatine on its back or reverse side. A new invention was thus born, and jointly the gentlemen named have received a second patent for process and product. The following figure represents the film as it will be soon offered to



the trade. S, represents the flexible support; E, the sensitive coating; L, the interposed gelatine layer; and B, the gelatine backing.

In practice, the emulsion layer containing the image may be stripped from the flexible support by the application of warm water, which dissolves the interposed gelatine layer L, and the detached film may then be used alone or affixed to any suitable support for printing purposes. The inventors prefer to attach the film to a glass support before removing the paper, as described by Mr. Eastman in his individual patent.

Jointly these gentlemen claim:

"1. As a new article of manufacture, the herein-described sensitive photographic film, consisting of a suitable flexible support coated on one side with a layer of gelatine, and on the other side with a layer of sensitive gelatine-argentic emulsion attached to the support by an interposed layer of relatively more soluble gelatine, substantially as described.

"2. As an improvement in the art of photography, the herein-described process of making sensitive flexible photographic films, consisting in coating a suitable flexible support on the reverse side with a solution of gelatine, in drying the said coating, in ap-

plying to the face side a coating of soluble gelatine, in drying the said coating, and in subsequently applying thereto a coating of gelatino-argentic emulsion of relative insolubility, and in drying the same, substantially as described.

"3. As an improvement in the art of photography, the herein-described process of making sensitive flexible photographic films, consisting in coating a suitable flexible support on the reverse side with a solution of gelatine, in drying the said coating, in applying to the face side a coating of soluble gelatine, in drying the said coating, in calendering the coated support, and in subsequently applying to the face side of the coated and calendered support a coating of gelatino-argenitic emulsion of relative insolubility, substantially as described.

"4. The combination, with the flexible support S, of the gelatine backing B, and the layer of relatively insoluble gelatino-argentic emulsion E, attached to the support by the layer of more soluble calendared gelatine L, substantially as described.

"5. The flexible support S, provided on one side with the insoluble gelatine backing B, and on the other with the soluble gelatine layer L, substantially as described.

"6. The flexible support provided with a layer of soluble calendered gelatine, and having a coating of relatively insoluble gelatino-argentic emulsion applied thereto, substantially as described.

"7. The combination, with a flexible support S, for a layer of sensitive gelatino-argentic emulsion, of the backing B, consisting of gelatine treated with chrome-alum or other chemical, and glycerine, substantially as and for the purposes set forth.

"8. As a support for the film of sensitive gelatino-argentic emulsion, a flexible sheet coated with a layer of soluble translucent gelatine and calendered on the coated surface, substantially as described.

"9. As an improvement in the art of preparing sensitive photographic films, the process consisting in applying to a sheet of paper, or like support, a layer of soluble gelatine and drying the same, then calendering the sheet to harden and polish its surface, and finally applying to the soluble layer of the calendered sheet a coating of relatively insoluble gelatino-argentic emulsion."

As we have already said, the manufacturers will supply these new films in "blocks" of a dozen or more, or upon rollers containing sufficient film for fifty or more exposures. Those preferring them in blocks, can remove them film by film, and use them backed with glass in the ordinary holder.

For greater facility in their use Messrs. Walker & Eastman have invented a holder, which may be attached to any camera of proper size. At one end of the holder, the roll of film is inserted, and its loose end drawn across and fastened to a roller on the other side. After the first exposure is made a light and peculiar system of machinery within the holder is then wound up, and set in motion. Thus, the film is drawn across the face of the holder until a given signal is sounded, when the works halt, and the film is ready for another exposure, and so on to the end of the film. A method of registering the exposures is supplied, and a puncture is made in the film automatically, as the film moves from roller to roller, to show where one exposure ends and another begins. We hope to have a drawing of it

This is a most ingenious and satisfactory arrangement, and proves the consideration of the inventors in not only giving us a new product, and a new process, but in producing the wherewithal to make its use easy, certain, and therefore enjoyable. Only think of going into the studio or into the fields with sufficient sensitized material for fifty exposures, 8×10 size, within a space of $9 \times 11 \times 2\frac{3}{4}$ inches, and not weighing four pounds. The roller-holder, for fifty films, weighs one pound less than two ordinary double holders filled.

Here is a *great* advantage among a hundred others. The inventor modestly states but a few in his specifications, as follows:

"The advantages which my improved sensitized films possess over the ordinary glass dry plates are too obvious to require description. Thus I am enabled to dispense entirely with the glass, the original cost and the expense arising from the handling, cleaning, breakage, and transportation of

which I save. I am also able to effect a considerable economy in the amount of emulsion used, as the glass, owing to its curvature and uneven surface, requires to be coated thicker than the gelatinized paper; and, as the operation of coating the gelatinized paper with the emulsion, may in manufacturing operations be carried on by machinery in absolute darkness, the highest sensitiveness may be given to the emulsion employed in my improved films without danger of fog from too much light; and the operations necessary to secure the desired image by the use of my improved films, in so far as they differ from the ordinary process now employed, are so simple as to be readily learned by the most inexperienced person."

We have received several of their film negatives from Messrs. Eastman and Walker, and have made satisfactory prints from them. Also an excellent portrait from a film negative from Mr. J. H. Kent, which is equal to his best work in every particular.

The Eastman Dry-Plate and Film Company (the incorporation of which is noticed in another column) are, we are informed, making preparations to manufacture the new film upon a large scale.

As it is proposed to perform all the operations of coating, calendering, recoating, drying, and cutting by automatic machinery, some time will be required for the completion of the machines, which are now well under way. In the meantime we shall keep our readers fully informed in regard to the new process.

OUR PICTURE.

The idea of representing a female in a simple garment might suggest itself to almost anyone, but it is not everyone who could make it interesting. To make a face speak, it must not only be photographed in the right light, with nice perceptions in the gradations of shadows, but the peculiar character of the individual, the disposition of the mind, must mirror itself in the countenance. This is what we call expression in portraiture, and the photographer who possesses the genius to call forth those feelings peculiar to an individual charac-

ter is more entitled to the name of artist, though it is grudgingly granted him, than the wielder of paint and brushes, who forms upon the canvas an unmeaning soulless representation called by courtesy a work of art.

Mr. H. Rocher, of Chicago, whose production we have the privilege of giving our readers, has chosen with good taste a subject of artistic rendering. The fair model is the renowned and beautiful English woman, Mrs. Lillie Langtry, who like Cleopatra, "The laughing queen has taken the world's great hands."

During her visit to our shores, Mr. Rocher was fortunate, or rather we may say she was fortunate in securing so excellent a photographer for giving an impression of her grace and loveliness. The character which she personifies is that of Galatea, in the mythological story of Pygmalion and Galatea.

Pygmalion, it will be remembered, was a young Cyprian sculptor who had made with wonderful skill a statue in marble so beautiful that no living woman could be compared with it for beauty. It seemed to be alive in its perfections, and lacked only motion. His art was perfect in its reflection of nature in her most beautiful mood. Pygmalion, though a married man, fell in love with this wonderful creation of his own imagination. He told not his love to any, least of all to his wife, but secretly caressed it, and decked it with jewels, and clothed it with costly garments of Tyrian purple and gold, forgetful that it was only cold and lifeless marble incapable of returning his affections. It chanced that some circumstance caused a temporary separation between Pygmalion and his wife. laughingly told him, as she bade him goodbye, that during her absence he might console himself by loving his statue. festival of Venus was at hand, celebrated with great pomp by the people of Cyprus; and while the odor of sweet incense ascended to the Queen of Heaven, Pygmalion mingled with the crowd of worshippers and placed his votive offering upon the altar, praying at the same time to the Goddess that she might transform his statue into a living woman. The altar flamed upward in token that his prayer would be answered.

On reaching his home he visited his statue, and leaning over gave it a rapturous kiss of love. Lo! a warmth exhaled from the parted lips, the eyes looked lovingly upon him, and a blush of maidenly modesty mantled the cheeks. Stepping down from the pedestal, she fell upon the neck of him who had created her in her loveliness.

The story has a sad ending, as we might naturally suppose. The injured wife calls down the vengeance of Heaven upon him for his broken vows. He is punished with blindness, and the statue returns to the marble. In his Earthly Paradise, Morris has beautifully rendered the feelings of Galatea on realizing her awakening from the marble, and meeting with Venus:

"My sweet, she said, and yet, I am not wise,
Or stored with words aright the tale to tell.
But listen, when I opened first my eyes,

I stood within the niche thou knowest well, And from my hand a heavy thing there fell, Carved like these flowers, nor could I see things clear,

And but strange, confused noise could hear.

"At last my eyes could see a woman fair,
But awful as the round white moon o'erhead,
So that I trembled when I saw her there,

For with my life was born some touch of dread;

And therewithal I heard her voice, which said:

'Come down and learn to live and be alive For thee a well-prized gift to-day I give.'

"Then on the floor I stepped, rejoicing much,

Not knowing why, not knowing aught at all,

Till she reached out her hand my breast to
touch;

And when her fingers thereupon did fall,
Thought came into my life and therewithal;
I knew her for a goddess, and began
To murmur in some tongue unknown to man."

We can almost excuse Pygmalion for his love to Galatea, were her charms aught of which we see represented in the beautiful photograph before us.

Beauty in itself is always interesting, but it becomes infinitely more powerful when it is in action, and associated with the graces which art is capable of furnishing. With great skill, Mr. Rocher has beautifully posed the body of his model, so that there

is nothing but the natural attitude of the limbs, free from all constraint and in harmonious motion. The position of the head upon the shoulders is exquisite. It reminds us of those inimitable works of art of ancient Greece. The drapery is so arranged as to cover without concealing the flowing form beneath, and the whole conception is full of truth and vigor.

Mr. Rocher may well be proud of his work. It is acknowledged to be the most faithful and artistic photograph of Mrs. Langtry, not only by judges in this country, but by those of her native land.

The negatives were upon dry plates, and the prints upon the excellent brand of paper imported by Mr. G. Gennert, of New York, known as the "Eagle Satin Finish."

AN INTERVIEW WITH A LENS LOVER.

THOSE who visited the Cincinnati Exposition will not forget the display of photographs made by Messrs. Allen Brothers, 14 and 16 E. Larned Street, Detroit, Mich., the product of negatives secured by the new lens marvel, manufactured by Herr Suter, of Switzerland. They will also remember how they marvelled that such magnificent results in quality and size could be secured by the diminutive instruments on exhibition. While this wondering was going on, a ship laden partially with Suter's lenses was crossing the sea. Now these lenses are distributed to delighted purchasers in various sections of the country. What some of these purchasers say may be seen by reference to the upside down advertisement of Messrs. Allen Brothers, in our current issue. What a particular operator with one of these lenses said to us will be tound below.

During a recent visit to the West, we were delayed a couple of hours on our homeward journey, at Grand Rapids, Michigan. We have a number of old subscribers there, and among them the oldest we think is Mr. Warren Wykes, 35 Monroe Street. Mr. Wykes has been over a quarter of a century in the service, and expressed himself as thinking he had done his duty, but he is still doing. His chief of staff, however, Mr.

R. M. Wilson, generally presides at the camera. On the occasion of our visit, we found these gentlemen admiring some negatives, which had just been secured, of 14 x 17 size, with their No. 6 Sutter lens. Mr. Wilson exhibited half a dozen on this cloudy day that were made after three o'clock in the afternoon with next to the largest diaphragm, each in about five seconds. After inspecting these negatives we were shown various specimens upon the wall, all of which bore out the opinion given us by Messrs. Wykes and Wilson. Mr. Wilson in answer to our interrogatories said:

"You ask my opinion in regard to the Sutter lens? Well, I can only speak good of it. I have been using a No. 6 since July, and have made all sizes, from cabinet, standing up, to a seven inch figure. In fact, I have two 14 x 17 size, which you see here on the wall, that measure ten inches from the top of the hat to the lowest point of the chin."

"Yes," we answered, "this is very good for head, but how are they for sitting and standing figures?"

"Oh," answered Mr. Wilson, "here is a 14 x 17, of a gentleman, sitting, half length, a side position, both the hands cut perfectly sharp, where one hand was three feet back of the other. These negatives are as finely cut as any cabinet or card I have ever seen. They do not possess that wiry sharpness given by some old lenses, but are beautifully soft. It is perfectly astonishing the work that can be done by so small an instrument, and with the open diaphragm."

"How are they as to time, Mr. Wilson?"

"Oh, as to time they are quicker than any other instrument I have ever used. I made a plain seventeen negative of a restless child, late in the afternoon, in three seconds with the open lens. Everything about it is perfectly sharp, as you see. We consider it almost a miracle. I had set the plate aside, intending to do nothing with it on account of the shortness of exposure for such a light, but trying to get another plate, and failing to get the child in the chair a second time, I made up my mind to develop the first one, and thus obtained a fine negative."

"Do you not think you are a little sanguine for these lenses?"

"Well, here are the results, and really I feel that I cannot speak too highly of the Suter lens, and only hope that it may find its way into all the leading galleries of the country."

"It may well be called universal, though I cannot speak much of its excellence in viewing, since I have only made one view with it. I never saw a 14 x 17 plate filled so nicely and cut so sharply, even into the very corners, plowing out the subject there as nicely as in the middle of the plate."

With such results and such sanguine testimony, we feel free to recommend our patrons to look into this important subject of the Suter lens.

THE SUMMER SCHOOL OF PHOTOGRAPHY.

The following extract, from an account of the season at Mountain Lake Park, Md., taken from the New York Christian Advocate, shows the prominence given to photography. We are promised from Professor Himes interesting details as to the methods employed in conducting the school which succeeded so well.

"The first thing to be noted in the programme for the current year is the session of the Summer School of Photography, which occupied the first two weeks in August. It is singular that the growth of photographic science has not suggested to some bright mind before this summer the idea of a summer school where amateur photographers might receive instruction. The progress made of late in the direction of amateur practice is amazing. Thousands of cameras have been sold within the last two or three years, and great establishments have grown up into prosperity upon the business created by the demand for photographic materials. Not till this summer, however, has a summer school for these amateurs been organized. This work was done by Prof. Charles F. Himes, Ph.D., of the Department of Natural Science in Dickinson College. He had as his assistant Mr. A. A. Line, of Carlisle, Pa., an expert in his profession. Dr. Himes has been recog-

nized for years as an authority in the line of theoretical and practical photography. No better man for such a task could have been found in the country. His success was complete. Thirty pupils enlisted themselves in the school, and for weeks the one topic of conversation, lectures, instruction, in the school, at the station in the woods, on mountain cliffs, in glades and shady nooks, was photography. Diaphragms, blue prints, dry plates, wet plates, cameras, negatives, developments, silver prints, toning, fixing, mounting-all these technical terms of photography took on a new meaning for these neophytes, who, with exuberant enthusiasm, set to work to master a new science and art. Their success was surprising. Young folks who had never had a camera in hand at the opening of the school, and who did not know that there was any other sort of a diaphragm besides the ones that they possessed as a part of their own internal arrange-

ments, who had never had an idea of how a photograph is taken, were able at the end of two weeks' instruction to take a fairly good negative, develop it, and print from it pictures that would pass muster anywhere as admirable specimens of photography. The Professor showed himself a master in his art, and the pupils won from him and from all who saw their work cordial praise for their proficiency.

"Many a charming glen, and graceful glade, and frowning cliff, and sparkling brook, and dashing cascade, and forest vista, and pretty cottage with its framework of trees, were caught by the camera, fixed indelibly upon a dry plate, transferred to paper, and now they form parts of valuable collections, which will be to their owners for years to come charming mementos of the First Summer School of Amateur Photography ever organized." Let us hope for more such schools.

Editor's Table.

PICTURES RECEIVED .- Prof. C. PIAZZI SMYTH has favored us with some very beautiful photographs of Winchester Cathedral, collected during a recent visit of his to that old-time structure. We do not have such subjects in this country. We have received some very artistic pictures of St. John's University and Abbey, at Collegeville, Minn., from one of our amateur friends, which are well worthy of having his name upon them, which they have not. Mr. E. A. Bass, Socorro, New Mexico, has favored us with a very characteristic group of donkeys and donkey-boy. A portion of the group represents the milk peddler with the kegs of milk tied upon the back of the donkey. This last-named individual is the same apparently all the world over, with variations. Mr. FRED. MULLER, Owatonna, Minn., sends us an example of his cabinet work.

A PHOTOGRAPH OF LIGHTNING BY ITSELF.— Mr. G. F. MUNGIER, of New Orleans, has favored us with a very curious photograph of a flash of lightning taken during a violent storm on April 21, 1882, at 9 p.m. The bolt struck about three squares from the camera, and set fire to the gallery of a house. A very curious reflection of distant lightning below the house is also visible in the picture. Mr. MUNGIER, we think, rightly claims to be the first who successfully photographed lightning. The path of the flash is as erratic as the Mississippi River in its course, as well defined, and very curious.

A SUCCESSFUL PHOTOGRAPHER.—Mr. J. A. SHOAFF, Fort Wayne, Ind., is an example of a successful photographer. His success is due to his long continuance at one place, to his enterprise, to his excellent work, and to his good prices. During a recent visit we found him busily engaged in erecting a pleasant homestead, where he will enjoy the profits of his past industry. May continued success attend him.

A New Stockhouse.—During our recent visit to New Orleans we had the opportunity of inspecting the new photographic-stock establishment of Mr. Theodore Lillenthal. It was neatly arranged, well stocked, and well cared for by Mr. Lillenthal's staff of employés. Besides the stock business, under the same roof,

Mr. LILIENTHAL conducts a large photographic business and an immense trade in frames and works of art. We were courteously received by him, and appreciated his attentions.

MR. S. T. BLESSING'S NEW ORLEANS ESTAB-LISHMENT .- Very few photographers in the South are unacquainted with Mr. S. T. Bless-ING, of New Orleans. His establishment has grown from small beginnings to an immense concern, and now includes not only photographic apparatus and requisites, but a tremendous frame manufactory, and an establishment for the sale of pictures and works of art. When we called upon Mr. BLESSING he was busily engaged in preparing his frame catalogue, which is to be followed by an elaborate one of photographic materials and stock, to be used for distribution during the great exposition forthcoming. Mr. Blessing's stock depot, under the charge of Mr. HARRINGTON is a model, and no wonder it is so popular. May it have continued success.

Two Splendid Works of Art .- Our readers will not forget "Our Picture" of the "Daughter of Danaus," issued with our August number, from negatives by Mr. C. W. Motes, of Atlanta, Ga. Our praise then was as high as we knew how to express it in words, and now we are entirely overwhelmed when we attempt to tell of the magnificence and artistic beauty of the large edition of the "Daughter of Danaus," just received from Mr. Motes. It is on a card 12 x 20, and the figure is sixteen inches in height. We do not think in all our experience, in a generation, that we have seen anything of its class to equal in classic beauty and artistic arrangement this splendid picture. It is really a marvel. What more can we say? Both subject and artist have done their best to produce a splendid result, and they have wondrously succeeded. This picture is accompanied by a companion, or one of similar style, rather, called "Bo-Peep." It is very different in general features from the other, not nearly so classic nor so pretentious, in fact, but still a magnificent result. Many of our readers saw these pictures at the Cincinnati Exhibition, and admired them, and it is rarely that any one enters our office now without stopping to look at these wonderful results. We congratulate Mr. Motes on being able to produce them.

We were recently favored with a visit from Mr. Alfred Freeman, of Decatur, Texas, who has just returned from a sojourn in Europe.

A NEW STUDIO IN PHILADELPHIA.-Mr. W. G. Entrekin has recently opened a magnificent studio at No. 1204 Chestnut Street, Philadelphia. Mr. Entrekin is well known to most of our readers either personally or by reputation, as the inventor of that great helper of photography known as the Entrekin enameller or burnisher. Therefore anyone told that he was about to open a studio in any city would conclude at once that it would be one that would be a credit to the highest polish of any community; and such is the fact. The entrance of the Philadelphia studio is graced by a series of beautifully formed display cases, in which the work of the new studio is already exhibited. By means of a tastefully contrived stairway, the reception-room is reached, where a series of fine examples may already be seen. Close to these is the drawing-room of the establishment for the accommodation of patrons. It is supplied with every convenience that money, skill, and experience could suggest or desire. Mr. Entre-KIN in person, is producing some magnificent re-All the departments of the establishment are, of course, supplied with the best talent and every convenience that taste could suggest, including the new production of Mr. Entrekin's machine shop, a splendid twenty-five inch enameller. This last has a new attachment rendering it superior to anything else that has yet been shown in its line. Mr. Entrekin is a genius not only in his art, but in the art of producing burnishers, and his new studio is well worthy of a visit from all who can make it convenient. We congratulate him on such a magnificent place in such an excellent locality, and wish him every success. In this connection it is but proper to say that Mr. Entrekin's enameller has had an unprecedented sale. Over fourteen thousand of them are now in use, and large agencies are established in Berlin, Vienna, and London. Each month, in "Our Picture," our subscribers may see the work of the Entrekin Enameller. The new "twenty-five inch," with recent improvements, will be illustrated and described by us before long, and one is now in use in our establishment.

REMOVAL.—Mr. THOMAS PRAY, JR., the skilful amateur photographer and editor of the Manufacturer's Gazette, has removed from Boston to 319 Broadway, New York, Rooms 3 and 4, where he expects to be able to attend to the increased circulation and business connected with his splendid weekly, which is bright and full of snap and vim always. How he is to better it we do not know.

Messrs. Douglass, Thompson & Co., have sent us their Bureau of Information for October and a very elaborate catalogue or book of designs for card-mounts and card stock generally. The last is perfectly marvellous, that such a variety of designs, as are here shown, should be in use by photographers. It seems almost unended, but it is no more extensive than is the variety of card stock now supplied by the chief manufacturers, Messrs. A. M. Collins, Son & Co., of this city. This catalogue is gotten up with a great deal of care, and is really a beautiful production.

GLOSSY RUBBER TRAYS.—This is the name given to the new, prettily formed, and light trays recently introduced by the Scovill Manufacturing Company. It is supplied with parallel ridglets at the bottom, which for developing purposes will prove of great advantage to the photographer in enabling him to take up his plate without spoiling. There are four sizes made of this pretty ware at present, and they are ready for the market.

A NEW stock-firm was started in Boston a short time ago, but was very short-lived. It was headed by Mr. George S. Bryant, well known in the business in Boston, but he soon grew tired of it, and disposed of his stock to Messrs. C. H. Codman & Co., who continue business at the old stand, 34 Bromfield Street, more vigorously and enterprisingly than ever.

A Request.—If photographers who send us newspapers will kindly mark the passages which they desire us to see, it will often save them disappointment. We cannot take our time to hunt out the reasons why the vast amount of matter sent to us is thus sent.

GOOD FOR PHOTOGRAPHY.—At a recent baby show held in Batavia, N. Y., Miss EULA PATRICK, daughter of Mr. & Mrs. John C. Patrick, of Batavia, received the first prize.

PLATINOTYPE PAPER.—Messrs. BUCHANAN, SMEDLEY & BROMLEY have sent us a very pretty sample of this paper, which they now supply in endless roll fifty-four inches wide. It seems to be without a fault.

Mr. John Ross, corner of Main and McWilliams Street, Winnipeg, Manitoba, sends us the first half dollar for *Mosaics*, 1885. Who comes next? Soon after this reaches our readers, *Mosaics* will be ready. Let the half dollars come on for early copies, for it will be out unusually early this year.

A FINE IMPROVEMENT .- As will be seen by his advertisement, our old friend, Mr. H. A. HYATT, of St. Louis, has recently removed to new quarters at the corner of Eighth and Locust Streets, directly opposite the new custom house and postoffice. The building is entirely new, elegantly lighted and splendidly arranged for the business. Everybody who visits it expresses great pleasure and satisfaction at the change. A step forward and in the right direction. Mr. Hyattoccupies the three upper floors of the building, and, to use his own language, "has one of the nicest and best arranged stockhouses in the country." As a first emanation from this new establishment, we have received an elaborate catalogue of frames, mouldings, etc., supplied and manufactured by Mr. HYATT. Since all this new arrangement is the result of push and pluck, and enterprise and popularity, we are glad to see it. We congratulate our friend, and wish him a degree of success commensurate with his enterprise.

AN IMPORTANT NOTICE TO THE TRADE, AND A NEW INVENTION. -The EASTMAN DRY-PLATE AND FILM COMPANY, a corporation organized under the laws of the State of New York, with a capital stock of \$200,000, has purchased the entire stock, plant, patents, and good will of the firm of Strong & Eastman Dry-Plate Com-PANY, and will continue the manufacture of the well-known brands of Eastman's dry plates, as heretofore carried on by the old concern, keeping them up to the highest standard of excellence, and will about January 1st next, or as soon as the necessary machinery can be completed, introduce a new photographic film, which it is confidently believed will reduce the cost of negative making very materially and relieve the photographer from the present rapid accumulation of old glass, besides having various other advantages, both chemical and mechanical which will duly appear upon presentation. The officers of the new company are: President, Mr. HENRY A. STRONG; Vice-President, Mr. J. H. KENT; Treasurer, Mr. GEORGE EASTMAN; Secretary, Mr. WILLIAM A. WALKER; Trustees, Messrs. E. O. Sege, H. A. Strong, J. H. Kent, W. A. WALKER, and GEORGE EASTMAN. All outstanding accounts will be settled by the EASTMAN DRY-PLATE COMPANY, STRONG & EASTMAN, proprietors.

The Photographer on Wheels is the title of a little newspaper published by Messrs. Reed & Wallace, travelling photographers at Mobile, Ala.

Messrs. Charles Cooper & Co., 194 Worth Street, New York, manufacture "Anhydrous Ammonia Cylinders," for ice and cooling machines—a hint for photographers who are troubled with hot weather in the summer time.

Mosaics, 1885 .- It is almost ready for distribution. See the advertisement. A new feature is introduced this year, namely, the addresses of the contributors, so far as we are permitted to give them. This will enable correspondence to be carried on by those who wish it. We hope that none of our readers will make it a burden to our contributors by writing to them needlessly. If they do, perhaps they won't get answered. Mosaics we have taken pains to make the most useful edition of any yet. Some of our readers tell us that we "say that every year," and yet every year the saying is true. We think that any one who will glance over the advertisement and see what is only a partial list of the contributions, will agree that we are right, though judging only from the titles. Orders can be sent in now, and will be supplied very shortly. Fifty cents, as usual, for one hundred and forty four pages of the best photographic information ever put together.

THE firm of Messrs. Garrison Bros., Chicago, Ills., of whom the well-known Dr. H. D. Harrison is the head, will soon open their rapid gelatine dry-plate manufactory. They expect to produce a plate that will meet all the necessities of the photographer, and that will develop rapidly, and at the same time be free from fog. We anticipate something excellent from this source.

Messrs. Buchanan, Smedley & Bromley, 25 N. Seventh Street, Philadelphia, send us a list of their "bargains" for the month of November, which includes many a good chance. On the list are some pretty groups of statuary for stand and table ornaments. Also things ranging in size from a solar camera down to a "female bust." Send for the circular. Correspondence is solicited.

THE BLAIR TOUROGRAPH AND DRY-PLATE Co., Boston, have sent us a copy of their new edition of The Amateur Guide in Photography, It is a splendid little work, full of fresh and good hints on photographic practice, and gives excellent ideas as to the choice of apparatus. Accompanying it is their catalogue of photographic apparatus, which is also complete, and contains many excellent hints. Send for copies to these gentlemen, and investigate them.

MR. M. H. ALBEE, Marlboro, Mass., has received a testimonial of thanks from the Chemical Club of Marlboro, for a portrait made by him of a deceased member. We congratulate him on his success.

Mr. H. ROCHER, at whose studio the splendid picture which embellishes our current issue was made, has sold out his entire business. May the Rocher mantle fall upon his successor, and good work continue to be made at the Weber Music Hall Studio, Chicago.

WE are informed by one of our old subscribers, Mr. W. L. Champlin, 373 Park Avenue. Buffalo, N. Y., that he has been shamefully wronged by some parties recently in business in that city, and cautions others lest they fall into the same trap. Mr. Champlin, will give information concerning the parties, if applied to in confidence.

Mr. E. E. Trowbridge, formerly of Cleveland, Ohio, has opened a new gallery at 103 State Street, Chicago, accourted by all that wealth and taste can secure, from exquisite decorations to a 48 x 60 camera. High prices will be maintained at the new studio.

Messrs. Smith & Pattison, 83 & 85 Wabash Avenue, Chicago, have sent us advance sheets (eighty pages) of their immense catalogue of photographic goods, frames, etc. The pages are nine by twelve inches, and are superbly illustrated. Sixteen pages are to follow, illustrating the papier maché accessories made by this firm, to be followed by as much more, of lists of albums, frames, mats, etc. The whole to be covered by fifty-pound cover paper, all handsomely printed.

Splendid Works of Art.—Mr. F. W. Guerin, St. Louis, Mo., has favored us with a number of large composition pictures from his negatives, such as were shown at the Cincinnati Exposition, and noticed in our report of the Exhibition. Mr. Guerin deserves the greatest credit for his efforts in the art direction. He has good ideas, employs excellent apparatus to work with, and is ambitious to excel in every direction. His technical photography is also first-class. He is one of our rapidly growing artists. We congratulate him, and wish him continued success.

JULY, 1883.—Copies of this magazine are wanted. One dollar each will be paid for them at this office.

Specialties.

MAKE OUT YOUR OWN BILL, and remit cash with your advertisements, or they will not be inserted.

ADVERTISING RATES FOR SPECIALTIES.—Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. & We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement. Postage-stamps taken.

HOLIDAYS AND WINTER SEASON.

If you are thinking of getting something new for your skylight, a background, fire-place, cabinet, tree, wall, negatives for borders, or any other article, bear in mind that we have many designs, and can suit you.

LAFAYETTE W. SEAVEY,

216 E. Ninth St., N. Y.

W. F. ASHE, artistic backgrounds

AND

ACCESSORIES,

REMOVED TO 68 WEST FOURTH ST.,

4 BLOCKS WEST OF BROADWAY, N. Y.

My new studio is fitted up with all the modern improvements, and the most refined demands from a critical public can be satisfied. A visit to my establishment, which has the largest showroom, containing the greatest amount of stock of any place in the world, will be gratefully appreciated.

I have again added numerous new designs to my great variety of patterns for backgrounds and accessories, and keep also in stock a large quantity of goods for parties to select from, saving time and delay on orders.

EVERY photographer in want of excellent lenses, for any purpose, will best serve his interest by consulting the new illustrated price-list of Messrs. Benjamin French & Co. before purchasing.

ROCKWOOD SOLAR PRINTING CO.

17 Union Square, New York.

TIME.—It is our intention that every order received in the morning's mail (when not to be put on stretchers) shall leave this establishment the same day or the following morning. If too late for the morning work, it is sent on the second day. Having our own engine and electric light, we are not at all dependent on the weather.

GEORGE H. ROCKWOOD, Business Manager.

WILSON'S PHOTOGRAPHICS.

\$4.00. Post-paid. \$4.00.

THE PLATINOTYPE PROCESS.
NOTICE!

Thomas H. McCollin, of Philadelphia, is no longer agent for the sale of materials for

WILLIS'S PLATINOTYPE PROCESS.

Licensees, both amateur and professional, and all who are interested in the process, will please address all orders and communications to Willis & Clements, proprietors of the patents, or to Buchanan, Smedley & Bromley the only authorized general agents for the sale of materials in the United States, 25 North Seventh St., Philadelphia, Pa.

VOGEL'S PROGRESS OF PHOTOGRAPHY, LATEST-BEST-\$3. WAYMOUTH'S

No. 18. VIGNETTE No. 18.

The old form of No. 18, Waymouth's Vignette Papers, oval, has been discarded, and a new pear-shaped style is now ready in its place. It is a beautiful piece of gradation and prints perfectly. Price \$1.25 per dozen. For sale by all dealers. See advertisement for all sizes.

No. 18. NOW READY. No. 18.

S. G. NIXON,

PORTRAIT ARTIST,

No. 813 Arch Street, Philadelphia, Pa.

CRAYON AND WATER COLOR PORTRAITS.

Solar prints and photographic enlargements furnished and finished in crayon, Indian ink, or water-colors. Photographic coloring on plain or albumenized paper and porcelain. Copies finished in Indian ink and water colors.

References and terms on application.



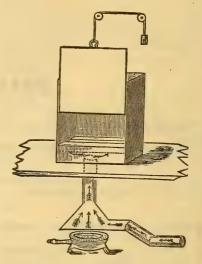
WILSON'S PHOTOGRAPHICS

Holds up to view all about manipulation, photographic art, posing, lighting, etc. Nearly 4000 sold. See advertisements and testimonials.

84.00

\$4.00

ADDRESS T. W. POWER, N. Y., Secretary of Association of Operative Photographers of New York City, for operators, printers, and retouchers, 392 Bowery, or 487 Eighth Avenue.



WILSON'S PHOTOGRAPHICS.

All about emulsion work and plate making-a whole big chapter. See index.

\$4.00

Buy it.

\$4.00

PORTRAITS IN CRAYON.

The new book by E. Long, on the art of making portraits in crayon on solar enlargements, covers the entire ground, and is sold for the low price of fifty cents. For sale by

EDWARD L. WILSON,

Philadelphia.

METAL GUIDES

FOR

A. M. COLLINS, SON & CO.'S

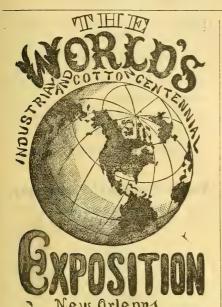
No. 26 GILT BEVELLED-EDGE CARDS.

The fancy-shaped mounts now so fashionable among photographers, require metal guides with which to cut the photographs. They are now kept on hand, and can be supplied in the following shapes, and at the prices mentioned:

	Ea	ch.
Cross	\$1	05
Star	1	00
Palette		90
Leaf		90
Bell		90
Crescent		80
Egg		60
Triangle		90
For sale by EDWARD L. WILSON		

EDWARD L. WILSON, 1125 Chestnut Street,

Philadelphia, Pa.



Gpening December 1, 1884; Closing May 31, 1885.

-UNDER THE AUSPICES OF THE -

States Government.

Appropriated by the General Government.

Contributed by the Citizens of New Orleans.

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the State of Louisiana.

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Appropriated by the City of New Orleans.

From \$5000 to \$25,000,

Appropriated by Innumerable States, Cities and Foreign Countries.

Every State and Territory in the Union represented, and nearly all the Leading Nations and Countries of the World.

The Biggest Exhibit, the Biggest Building and the Biggest Industrial Event in the World's History.

APPLICATIONS FOR EXHIBITS ALREADY RECEIVED COVER MORE SPACE AND A GREATER VARIETY OF SUBJECTS THAN THOSE OF ANY EXPOSITION EVER HELD.

The cheapest rates of travel ever known in people everywhere.
For information, address
E. A. BURKE,
Director General, W. I. & C. C. E.,
NEW ORLEANS, LA.



WILSON'S PHOTOGRAPHICS

Teaches how to get rid of every monster and trouble in the practice of the art.

PRINTING FOR AMATEURS

BY THE

PLATINOTYPE PROCESS.

Instructions given in developing negatives, intensification of negatives, platinotype printing, etc. Printing price-list on application to WILLIS & CLEMENTS,

> 25 N. Seventh St., Philadelphia, Pa.

For Sale .- Good gallery in a live town of 8000 inhabitants. Cabinets, \$4.00 and \$5.00 per dozen. Good reasons for selling. Address Box 113,

Batavia, N. Y.

\$4.00

\$4.00

WILSON'S PHOTOGRAPHICS.

It is the best book I ever got possession of. Those who want lightning or instantaneous processes had better get a copy and work with pleasure. Nothing like it; too good to be without .- Joseph Theiring, Cincinnati, O.

WANTED .- A trustworthy man of good morals, to take charge of the printing, toning, etc., and assist in retouching, in a first-class gallery. Address with samples of work and reference, also terms. Open for fifteen days for engagements.

W. R. HAWKES,

74 Meridian St., E. Boston, Mass. WE ARE READY.

Owing to the sudden increase in the demand for the Rockwood Dry Plates, we were obliged through the months of July and August to decline many orders. We have now more than quadrupled our facilities, and introduced improvements which will, we hope, enable us to fill orders with promptness, and give us plates possessing, if possible, still more sensitiveness and uniformity. For price-lists and samples of work done by the "Rockwood Plate,"

Address J. A. RANDEL, Manager, 17 Union Square, New York.

Wanted.—A thoroughly competent man to run a good paying gallery on shares. Reference given and required, Must be rented by December 1st. Send samples of work and photograph of self. Address P. B. SMITH,

Box 199, Ovid, Mich.

FOR SALE.—Well-furnished gallery in town of 6000. Business, \$40 to \$50 per week. Rent \$75 per year. Must sell on account of sickness. Address Photographer,

Box 175, Troy, Ohio.

For SALE .- The patent and sole right of manufacture of French's Ornamental Relief Borders. Any one having a gallery can make these at a very little extra expense. Having sold my gallery last spring with a view of moving out of the State, and going out of the photograph business, I temporarily fitted up apartments solely for the manufacture of foregrounds. It is now my desire to make a change by the first of January. However, I will sell the patent at any time. I have never been able with my facilities, to meet the full demand for these goods, and have made no attempt to push the sale of them. I will sell at fair figures now, or on quite reasonable terms after the holiday season. Address C. M. FRENCH,

Garrettsville, Ohio.

GALLERY WANTED.—I would like to get a furnished gallery to run on shares or to rent by the month, with privilege of buying if satisfactory. Address, with sample and full particulars,

Box 50,

Dalmatia, Pa.

Vogel's Progress of Photography,

1864.

1884.

M. WERNER,

PORTRAIT ARTIST,

No. 102 N. TENTH STREET, PHILADELPHIA.

Photographs finished in crayon, India ink, water colors, and pastel, in all sizes, in the very best styles, and at moderate prices.

Solar Prints and Enlargements Furnished.

Vogel's Progress of Photography,

LATEST-BEST-\$3.



WILSON'S PHOTOGRAPHICS

Teaches every step in Photography.

BARGAINS!

One No. 9 Voigtlander portrait lens for 17420 plates, one of the best of the series, and cost over \$400, only......\$200 00

Terms C. O. D., with privilege of one week's trial, and return of money by agent on return of lens.

> Address BACHRACH & BRO., cor Eutaw and Lexington Street, Baltimore, Md.

Wanted.—Salesmen, photographers, printers, toners, and mounters, to work at the World's Industrial and Cotton Centennial Exposition, at New Orleans. Parties desiring to winter in the loveliest climate and most curious city in America, here have a chance for enjoyment and pleasant work. Send photograph of self, and state wages. Address New Orleans,

care PHILADELPHIA PHOTOGRAPHER,

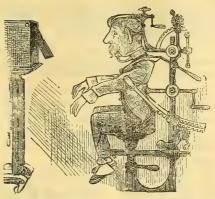
1125 Chestnut Street, Phila.

A GREAT BARGAIN.

FOR SALE CHEAP .- A well-known, thoroughly equipped, and extensively patronized photographic business, situated on one of the principal avenues in the upper part of New York City, and yielding a net yearly profit of \$6000. The proprietor of the business is owner of the premises wherein the same is conducted (a fourstory brick house, twenty-five feet front), and the business will be sold to some responsible party only, who is willing to take a lease of the whole premises except a part of the ground floor. A desirable party may have a lease for five or more years at a yearly rental of \$1800. The gallery is only one flight of stairs from the street, has an attractive entrance, is handsomely furnished, and is one hundred feet deep. The skylight-room is twenty-five by forty-two feet, and is said to have one of the largest built lights in the State of New York; this room has parquet flooring. This establishment has a large and select class of customers who require fine work, and it now enjoys a high reputation for the quality of its work, which the present proprietor desires to see continued, and the business will be sold only to a responsible party, and one who fully understands photography. The inventory will show it to be worth more than the price asked. Will give a five or ten years' lease. Orders from old negatives run about \$175 to \$200 a month, on an average. Price, \$7000; cash \$5000, mortgage \$2000, if desired. Persons answering the description given above, will be afforded every facility to investigate the business, and can purchase at a great bargain, as the owner desires to give his attention to other matters. For particulars, address GEORGE D. McCARTY,

Bennett Building, New York City.

VOGEL'S PROGRESS OF PHOTOGRAPHY. LATEST—BEST—\$3.



Don't do that any longer. Get Schindler's Picturesque and Easy-Posing Chair. Send for prints and lists to the factory, West Hoboken, N. J. Our photographic studio furniture is a leading specialty, unequalled in usefulness, quality, and cheapness. For sale by all dealers.

SITUATIONS WANTED.

No charge for advertisements under this head; limited to four lines. Inserted once only, unless by request.

By an artist (academician) in oil, pastel, crayon, ink, and water-color. Address Artist, care of Brügge, 38 East Fourteenth Street, New York City.

As photographic assistant or manager. Competent to take charge of gallery. Address Photographic Operator, 6048 Lombard Street, West Philadelphia, Pa.

In a good gallery in Pennsylvania, New York, or one of the Eastern States. Have had much experience in ferrotypes and printing. Address James Perrigo, Hodgdon, Aroostook Co., Maine.

By a first-class operator and retoucher, in a gallery where good work and system are required. Have had twenty-three years' experience; understand dry-plate process thoroughly. Sarony's developer (private). Address, with terms, Edward E. Elliott, Jr., 8 Ann Street, Allegheny City, Penna.

By a first-class negative retoucher. Specimens furnished on application. Address E. R. Crane, 1913 Callowhill St., Philadelphia.

By a first-class operator, capable of managing business. Best reference given and required. No Sunday work. Address Foster & Bayley, Clinton, Ontario, Canada. As head printer in some first-class gallery. Address John J. Hallowell, 63 Point Street, Providence, R. I.

By a good general workman, in a mild climate during the coming winter. Address Photo., cor. Main and Church Streets, Norfolk, Va.

By a steady man. A first-class printer and operator; wet and dry plates. Eight years' experience. Address S. J. Doughan, Norwalk, 0.

By a lady, said to be successful with customers, to attend and finish. Miss L. Jones, 614 N, Sixteenth Street, Philadelphia.

By a young man of two years' experience, as printer or assistant. Understands making himself generally useful. Best of references. Address Nathan Brower, West Troy P. O., N. Y.

By a photographic printer, after November 1st. Address Nitrate of Silver, Scranton, Pa.

By a competent retoucher. Knows something about operating. Address Retoucher, Box 373, Ovid, Mich.

In Florida or the South, by a young man competent to run small gallery. Address Will A. Robinson, Thomasville, Georgia.

SAVE PHOTOGRAPHS.

UNDERWOOD'S PATENT SAMPLE BOX



The Most Convenient and Economical Device yet offered for Mailing Fourth Class Matter.

We make small sizes of Dove-tailed Boxes, with shaking and hinged lids.

If you want Special Size, send article to be fitted.

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THE H. C. UNDERWOOD MFG. CO.

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THE ART UNION.

AN ART JOURNAL FOR PHOTOGRAPHERS.

PUBLISHED BY

THE AMERICAN ART UNION, 44 E. Fourteenth Street, New York.

SEND FOR PROSPECTUS.

The purposes of the association are to publish original etchings and engravings of the highest grade,

This illustrated monthly art journal has for its leading feature the contributions of the artist members, both in the form of papers and illustrations.

THE NEW FILM COMPANY.

The Following Circular Explains Itself:

OFFICE OF
EASTMAN DRY PLATE COMPANY,
341 State Street.

ROCHESTER, N. Y., October 1, 1884.

TO THE TRADE:

The Eastman Dry Plate and Film Company, a corporation organized under the laws of the State of New York, with a capital stock of \$200,000, has purchased the entire stock, plant, patents, and good will of the firm of STRONG & EASTMAN, proprietors of the EASTMAN DRY PLATE COMPANY, and will continue the manufacture of the well-known brands of

EASTMAN DRY PLATES,

as heretofore carried on by the old concern, keeping them up to the highest standard of excellence, and will, about January 1st next, or as soon as the necessary machinery can be completed, introduce a new

PHOTOGRAPHIC FILM

which, it is confidently believed, will reduce the cost of negative making very materially and relieve photographers from the present rapid accumulation of old glass, beside having various other advantages both chemical and mechanical, which will duly appear upon presentation.

The officers of the new company are:

HENRY A. STRONG, President, GEORGE EASTMAN, Treasurer, J. H. KENT, Vice-President, Wm. H. WALKER, Secretary,

Trustees:

E. O. SAGE, H. A. STRONG, J. H. KENT, W. H. WALKER,

GEORGE EASTMAN.

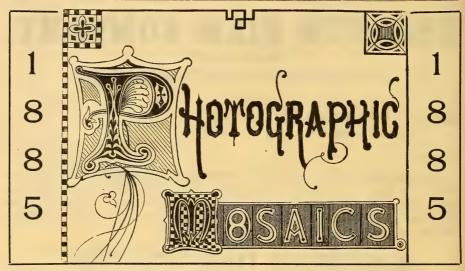
All outstanding accounts will be settled by the

EASTMAN DRY PLATE COMPANY,

STRONG & EASTMAN, Proprietors.

A full description of the New Film will be found on another page.

MESSRS. EASTMAN & WALKER appear to have surmounted the difficulties hitherto encountered in the manufacture and use of films, and they will, no doubt, meet with their reward in the extended sale that such a product is sure to have.



144 PAGES .- 50 CENTS; CLOTH COVER, \$1.00-144 PAGES.

CONTENTS.

- A Pot Pouri of the Past.
 Bits of Experience, Geo. H. Croughton, Phila.
 How Rapid are Dry Plates? H. D. Garrison,
- Chicago.
- 4. The Photographic Dude. J. Pitcher Spooner, Stockton, Cal.
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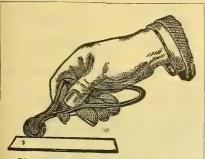
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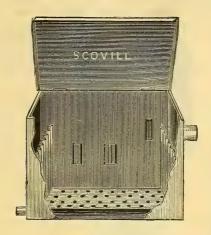
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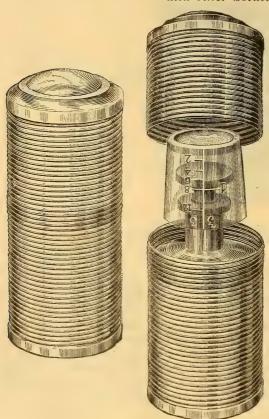
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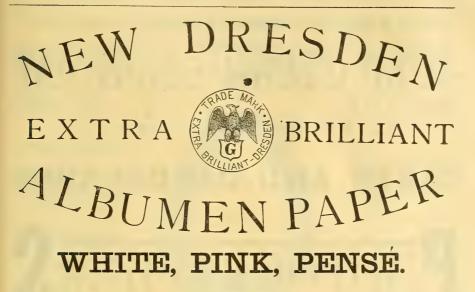
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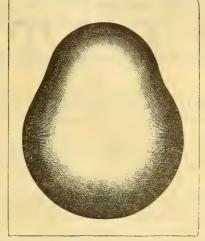
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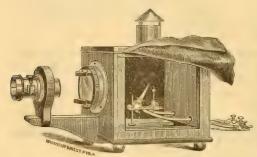
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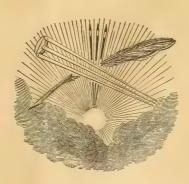
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Yours truly, Smith & Partison, which is certainly going to be very heavy.

Gentlemen: The No. 6 B Sufer Lens is "a darling." Just made a 6½-inch head A No. 1. Cut way back, Lens could not be better. Money could not take it from me.

GENTLEMEN: The No 6 B Surer Lens leads them all. We make from cabinets to 14 x 17 with it—in fact, everything but eabinets and cards of babies. We can make a standing cabinet in 30 feet distance, and have made quite satisfactory 14 x 17 heads in thirty seconds on a wet plate. Would prefer it to a ——, even if both were same price.

ALLEN BROS.

ьем Вкоз. Свитя: Please make any claim you like for the Suter Lens No. 5 B, and sign my name to it.

BATTLE CREEK, MICH., September 10, 1884.

GENTERMEN: We feel that we have given the truly wonderful Suter Tube a careful and thorough trial. Ours is a No 6, and we are now using it for all sizes of photos., from cards to 14 x 17. We notice one of its beauties in that it makes accessories and backgrounds appear correctly, never tipping panels and pillars of backgrounds out from each other at top, like many other tubes.

Respectfully, E. H. Perky & Son,

CHICAGO, September 29, 1884.

GENTLEMEN; Having tried the Mo. 5 Suter Lens, I am quite satisfied it is the finest of the kind I ever saw. I made at 1x 1x 4 forniture negative in less than one-fourth the time that would be required by the ——, which coosts nearly double in price. Itsee 8 x 10 head on a wet plate in eight seconds, and on the whole I consider it a wonderful lens. Shall want a Mo. 6 B also.

Then Chouinard.

CRAND RAPIDS, August 22, 1884.

ALEBY BROS.

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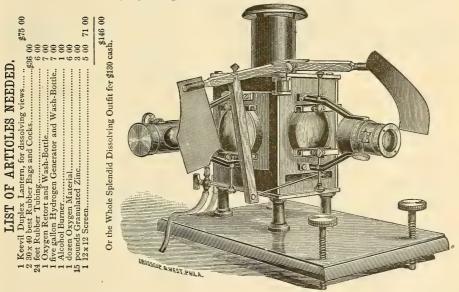
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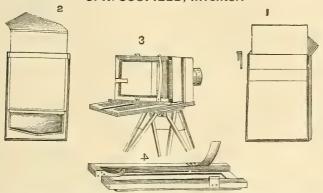
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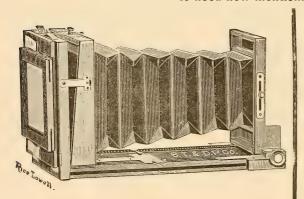
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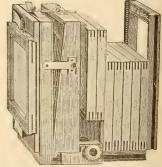
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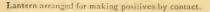
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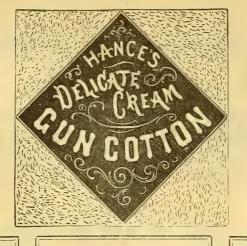




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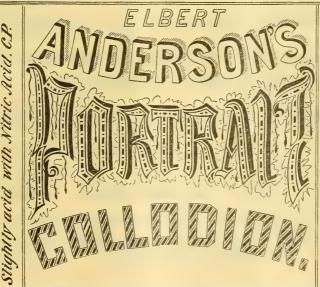
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No. 252.

PHOTOGRAPHY AT THE NEW ORLEANS EXPOSITION.

A RECENT visit to New Orleans enables us to report excellent progress in the various departments of photography at the New Orleans Exposition.

Our readers are aware that the opening of the Exposition has been postponed to December 16th. For this reason matters have gone a little slower than we expected, and we are not able to report as great advance as we had hoped by this time. But we are able to state, however, that matters are getting on splendidly, and that the finest photographic exhibit ever seen in the world will be displayed at New Orleans during the great world's exposition there.

A complete change has been made in the locality of the photographic department. Instead of being in the north gallery (the location first chosen by the Chief of Installation, Col. Samuel Mullen, and the Chairman of the Photographic Committee), the exhibit will be held in the gallery of the Music Hall, in the very centre of the Main Building. It is the most attractive location of all. Here will be two great galleries, with a connecting one behind the great organ, devoted to photography, giving a splendid opportunity for display, and all that could be asked. From the gallery the sweet strains of music and the lovely voices of the songsters can be heard while the pictures are being enjoyed.

The great exhibition in the Agricultural Department may be observed on the north, the whole line of machinery, from one end of the Main building to the other, on the west, and the curious collections of the Foreign Department on the south. In front—everything.

We are happy in having secured this splendid site.

Even at the late hour at which this will be seen by our readers, there will still be time for sending exhibits, providing the parties have been farsighted enough to secure an application for space. We can say, unofficially, that all who come thus, even a little late, will have the best attention possible. We shall be on hand personally at the Installation Department, in cooperation with the Chief of Installation, therefore photographers may feel assured that they have a friend at court, and will be taken care of.

Owing to the great press of work in Col. Mullen's department, we found ourselves a little behind-hand, but he placed the Western Union Telegraph Company at our disposal, and we have used our utmost endeavors to work up the display to the high satisfaction of all concerned—of the lovers of our beautiful art. In our own mind's eye we can see the plan developed and perfected, and must express our satisfaction in advance, with the arrangements as far as made. No effort shall be spared to make

them complete. We personally hope that a large body of the photographers of the Uuion will be present to see this grandest of all photographic exhibitions.

The exhibit of photography, however, will not be confined to this gallery. In the second largest building of the series here, known as the "Government and States" Building," many of the States of the Union will advertise their resources by means of photographic transparencies. Some of these collections are superb and immense. The State Geologist of Kentucky will have one of the finest of all displays in the Kentucky State exhibit, which will illustrate the geological curiosties of the State, and will be exceedingly beautiful and interesting. United States Government will also make a fine display of transparencies of some of our western country, together with those of various other natural objects, but all of these are to be eclipsed by the great exhibit from Arizona and Colorado. Those from Kentucky will be made by Mr. James Mullen, of Lexington, while those of Arizona are the handiwork of Mr. W. H. Jackson, of Denver, Colorado.

In the southeast gallery of the Main Exposition Building the establishment of the Centennial Photographic Company is located under concession granted by the board of management. A large number of photographers are already at work there preparing for the greater work to come, and thus employment will be given to a great many worthy fellows during the coming dull season of winter. The whole manufacture of the photographs of the exposition will be transacted here, the building being peculiarly fitted for the purpose. The printing-room will be arranged on the south side, while all the other departments of the work, and for the sale thereof, are on the east side of the gallery.

A number of well-known photographers are engaged in this arrangement, and seem to understand thoroughly the work which they have undertaken.

The new building of the Art Department is within sight of the Main Building. It is of iron, and will contain a magnificent display of art work from all parts of the world.

As a work of art, the grounds on which the Exposition is located, are beginning to look more complete and satisfactory. Each day matters improve in appearance, and each day grow more rapidly. our last visit, the 15th of November, the gardeners were planting bulbs, shrubs, flowers, trees, and what not for the decoration of the grounds, and before this reaches the eyes of our readers, the whole grand park will be in beautiful bloom. thousands of gardens of New Orleans are made beautiful by the golden fruit of the orange tree, now almost ripe. The trees are as green as August in the North, and the winter like June.

We hope to have more to say about the city presently, our engagements so far not permitting us to see what is beautiful and picturesque in the city itself. But in going through it from time to time, we learn that there is much that is picturesque and ripe for the camera. Our readers will share what we see at the earliest opportunity.

EXPERIENCE WITH GELATINO-BROMIDE PLATES ON BOTH SIDES OF THE ATLANTIC.

BY G. H. CROUGHTON, Late of London, England.

IT was in the year 1874 that I commenced my experience with gelatino-bromide in England. Mr. Kennett, of London, had issued to the profession a dried gelatinobromide pellicle, with which every photographer was to make his own dry plates, and it could also be used in a moist condition. A retired officer in Her Majesty's Indian Army (Sir Atwell King Tuke) brought some to me at my residence, and I shall not forget the eagerness with which we watched for the results, but my success was not by any means proportionate to my expectations, and the experiment was not repeated in that form. My next experience was with collodion emulsion, and that, too, was not satisfactory. Some two or three years passed with slight experiments, but all my experience was only calculated to confirm my first decision, that dry plates would not do the same quality of work as wet. I argued, as many hundreds have argued since, from too little knowledge of the material I was working with, and complete ignorance of the theory and practice of alkaline development. It was at the end of the year 1876 that I first succeeded in getting a good portrait in the studio with a gelatino-bromide plate, and from that time out I have been an enthusiastic worker with them, and for five years before coming to the United States, I had discarded collodion and silver baths entirely, and used exclusively gelatino-bromide plates for all kinds of work. I think I have used every kind of gelatino-bromide plate made in England. Have used ferrous oxalate, carbonate of potash, sal soda, and ammonia developers. My experience here has not been anything like so extended, but I expect during the next six months I shall see a great deal of experience with American plates in my position as Chief of the Photographic Staff of the Centennial Photographic Company, at the New Orleans Exposition, but even my limited experience with plates of American make has confirmed me in the conclusion arrived at by my experience with English plates, and that conclusion is this, that in spite of all the abuse that has been lavished upon it, and the many claims made as to the superiority of the soda or potash developers, there is nothing yet to beat the old ammonia pyro for development, and the great secret, if secret there is, is contained in two words, but they are two an American does not like, and they are "go slow." My experience (and I am not alone in it) is that the development of gelatino-bromide plates should commence with plenty of restrainer; that an overexposed negative can be utterly ruined by commencing the development with a strong developer, is too well known to need enforcing. The same negative by going slow, could have been made to produce prints equal to a properly exposed negative. You have that power also with the potash and soda developer, but not to anything like the extent you have with ammonia. Most formulas tor development with ammonia give the restrainer (the bromide) in conjunction with the accelerator (ammonia). This is With a just reversing the order of things. fixed quantity of bromide in conjunction

with a fixed quanity of ammonia, there can be no power of modification. The restrainer should be in conjunction with the intensifier (pyro), and then you have any amount of power over your development. For instance, for over-exposure, if your bromide and ammonia are together, and you use less of ammonia to counteract that over-exposure, you reduce also, in the same proportion, your restrainer. When ready you want more restrainer. Now, if your bromide is with your pyro, you have both the power to restrain development and the power to thicken your image at one and the same time, just where you want it, because overexposure causes thin pictures, so you restrain development and intensify at the same time. The formula I give below is one which was published some years ago by an English firm of dry-plate makers, and I have used it most successfully with every brand of plates, both English and American. I have succeeded better with it than with the formulas published by the different platemakers with their plates, and I think that a plate which cannot be successfully developed by it, cannot be successfully developed by any developer whatever.

The stock solutions are:

No. 1.

Water,	۰	. 1 ounce.	
Pyrogallic Acid, .		. 4 ounces.	
Bromide of Potassium,		. 600 grains.	
Pure Nitric Acid, .		. 20 drops.	

No. 2.

Liq. Ammonia (80 per cent.), 2 ounces.
Water, 2 "

Both the above in four-ounce dropping-bottles. You have in No. 1 a solution which contains a quarter of a grain of pyro to each minim of water. To develop, take enough water to cover well your plate—staining comes from having too little. I take two ounces of water for a 5 x 8 plate. Put your exposed plate into the developing-tray, and pour two ounces of water upon it; your tray should be upon a level stand, so that your plate will be covered with the solution. Now, with your measure or developing-cup, drop from eight to twelve drops of No. 1. Pour your water from the developing-tray into the cup, and return

with one sweep over your plate. The object of this is, that while you are measuring out your restrainer your plate is soaking, and you can get rid of all boils without fear of marking. Now you have your restrainer soaking into your film while you are dropping your ammonia into your cup. Go slow; drop eight or ten drops of the ammonia solution No. 2 into the cup, and return the solution in the dish, give it a little stir round, and flow quickly over the plate again. Now, the development will begin; it should not appear for at least a minute; if it does, add a drop or two of the No. 1 solution, pour the developer into it, and flow again over the plate. If it does not appear in that time, do the same with No. 2.

If I have made myself understood, you will see what complete control you have over your development by this method, and although I have seen some very high-class work done with soda and potash developer, I have yet to see the developer that will produce negatives with finer quality than have been made with this developer.

CONCERNING THE DURABILITY OF BROMIDE OF SILVER GELA-TINE DRY PLATES.

BY LE BELITSKI NORDHAUSEN.

VERY soon after the advent of the gelatine dry plates it was declared that they were unalterable by time, that they might be kept for years without deterioration, and at the time the assertion was not disputed. Later we read in one of the journals of the profession that plates had been kept two or three years, and were just as good as the day they were coated. Yes, they had even improved with age, like good wine. The writer of this can, from his own experience, say that plates eighteen months old were found to possess the virtues they had when they came fresh from the hands of their maker. But since the rage for very quick plates has become prevalent, and a high degree of sensitiveness has been given to the emulsions, the keeping qualities cannot be claimed in the same degree. So that now, plates which when fresh were excellent, giving clear and crisp negatives, are found to deteriorate in a short time, and are liable to give foggy and poor images.

This tendency to change is so great that even a week is sufficient to alter materially the good qualities of an emulsion. A friend who had bought a quantity of plates of a celebrated maker, wrote to me in September last, as follows: "The very sensitive plates made by Mr. X. in eight days show fog around the edges. This is greatly to be deplored, since I must use them in my gallery by reason of their sensitiveness. The whole surface is seldom fogged, but very frequently the borders become very black on development. This fogging is either very slight along the margins, or extends deep into the surface of the plate, according to the care with which they are kept. In the majority of cases the attacks are confined to the margins. It is a sort of border warfare, but sometimes it extends further, and I think it is only a question of time for the insidious enemy to invade the heart of the beautiful country, and spread havoc and ruin over the surface of the fair film."

Now, to test the truth of these accusations against our favorite, I resolved to institute a series of experiments. Accordingly I procured a variety of plates from different sources-from the Eisenacher Plate Congress, as well as a number of others of different makes and age. All of these I tested, then had them properly packed, and kept in a dry place. I only tried plates of established reputation; the poorer ones were soon set aside. These plates so tested showed, in a greater or less degree, the ominous black margins-with one variety nearly two inches deep, but the middle in all was clear. Those that were the least sensitive fared better. One variety of this latter class, of ordinary sensitiveness of three years' standing, was somewhat foggy, but still could be used.

The paper mats between the plates showed their markings upon all very strikingly.

It is clear that this fact of deterioration is a very disagreeable one both for the maker of the plates and the consumer. I know it has led to many unpleasant relations. The maker is blamed by the buyer,

and the latter is accused by the former of want of skill or care. Either both are innocent, or the blame is to be divided.

To find this out, let us trace the evil to its source, and if we can find it, it will be overcome. The true method of therapeutics is not to doctor the evil when it has made its appearance, but to strike at the root and prevent it. Now, in the first place, the question will arise, Is this complaint so novel, has it just arisen above the horizon? The answer will be, no! by no means!

The old collodion wet method presented the same phenomenon under similar circumstances. Let us seek to bring out permanently these similarities.

If we hunt up the agents liable to produce fog, we shall find five: 1. Great sensitiveness; 2. Presence of unreduced material in the film; 3. Impure air; 4. Dampness; 5. Time.

1. To attain a high, or the highest, sensitiveness of which any method is capable, has, with the wet process, its peculiar difficulties, requiring the highest degree of purity in the chemicals, and both in the silver bath and the collodion, the greatest possible neutrality. If there was the least tendency to alkalinity, fog was the consequence. We have a similar phenomenon attending the use of gelatine emulsion.

Dr. Eder, in his celebrated work, says, "all methods which were intended to give a very sensitive result have a tendency to produce fogging emulsions," and that plates made with this emulsion which, when fresh, were free from tendency to fog, or, more properly, only had a slight fog, which did not injure them, required a very slight disturbing action to convert it into a decided and ruinous fog. For it follows that in so extraordinary sensitive emulsions, a modification of the granular bromide of silver is apt to be influenced by other reducing agents than light itself.

When plates of average sensitiveness, formed of not fully ripened silver bromide, are placed side by side, in the same case, with those of the highest sensitiveness (with fully ripened bromide of silver in their constitution), it will be found that the former keep good for weeks or months, while the latter are ruined.

We shall here only venture the supposition that probably the bromide of silver in the process of ripening from the amorphous to the crystalline form, acquires not only a high degree of sensitiveness to the influence of light, but also an increased susceptibility towards other agents.

The behavior of other natural bodies has led me to this conjecture, and I have, relying upon this, been enabled to make bromide of silver emulsion possessed of a much finer state of division than it generally has.

2. I believe it is a well-known fact that the organic matter foreign to the gelatine causes frequently the fogging, and the reducing material acts upon the prepared plates. A very convincing proof of this is, that a sharply defined region of fog may occur in the centre of the plate, while the borders are perfectly clear. These spots arise when any cause interferes with the regular and uniform drying of the plates, so that portions of the plates remain damp for a longer time than others, or from any sudden increase in the temperature. In both cases products of decomposition of the gelatine are engendered, which act as reducing agents upon the bromide of silver.

The fact that purified gelatines are less liable to contain foreign matter, therefore enables them to yield better results.

The washing of the gelatine, which I first employed in 1882, I continued for a year and a half in the supposition that it was an infallible means, but in the spring of 1884, to my misfortune, I found that there were varieties of gelatine in which it served no purpose, that is, which contained bodies not soluble in cold water, and which acted disturbingly.

Another fact to be observed is that the high degree of sensitiveness of the bromide of silver emulsion is produced by aid of ammonia, and that this agent has a marked influence upon gelatine.

The organic matter of the gelatine is supported by the ammonia in its reducing powers. Now, if such an emulsion is imperfectly washed, so that it gives an alkaline reaction, a very active agent is present for endangering the subsequent durability of the plates.

We have observed a similar phenomenon with the wet process. There are formed in the silver bath, injurious organic combinations which produce fog. The solarization of the bath precipitates the organic matters, or they are oxidized by the permanganate of potassa, and made harmless.

Concerning the action of the air upon plates, I think we are not justified in attributing any deleterious effect to pure atmosphere.

The constituents of pure air, oxygen, and hydrogen, as far as my knowledge extends, have no bad action. But the case is different when impure air and bad gases are present, and they are often present in the atmosphere.

In the wet process we have had a like experience. I have had collodion plates ruined by leakage from an imperfect gascock. Vapors from ammonia, arising from stables and closets. I even was unable to get good collodion results in a room of pure air impregnated with the odor of pines. Vapors from oil, ether, and varnish were also injurious. Now, when we work with the dry plates we are apt to think that all that is necessary is to exclude the light, but there are other more insidious agents of ruin. The action of these injurious bodies is slower, perhaps, upon the dry surface, but quite as determined.

If the deterioration is to be laid to the blame of the maker, and not to be sought from the action of external agents, why should not the injurious action be equally distributed over the plate, and not confined to local portions.

When we recollect that the paper of commerce used in wrapping the plates is not chemically pure, and that it, by its nature, acts as an absorbent of impurities, allowing the free passage of gases through its pores, and that from its very color (black) it keeps out the light, and facilitates absorption, is it any wonder that the external agents act upon the enclosed bromide of silver films? I think it would be a miracle to hope to keep plates any length of time subjected so such influences.—

Deut. Photo. Zeit.

(To be continued.)

"HEN, PEA, HAY."

PHOTOGRAPHIC journals for some time back have printed in their advertising pages, three tiny woodcuts symbolic of the words which head this paragraph. More than 5726 photographers have been mystified to know what these characters mean. The various editors have been almost questioned to distraction to explain the conundrum. For our own part, becoming exasperated, we have resolved to break the secret, and let the public know the true inwardnes of affairs. We seldom get time to read our advertisements, and when we were accused of "playing a trick upon the public" by the insertion of these cuts we denied the soft impeachment. But recently we find that we are guilty with the rest, and that our readers, for the first time in our experience of twenty-one years, may accuse us "of complicity in a libellous effort to disturb, and even ruin a reputable firm." What the influence of this mischievous action may have been is hard to calculate. Our further actions, however, will be an endeavor to correct the trouble. The characters are a play upon the English language, and really mean N. P. A., which in turn meaneth National Photographers' Association. It does not follow that the article represented by N. P. A. is a thing of the past, as is the old Association of pleasant memories, for it is truly a substantial thing of the present, and none less than a celebrated brand of paper which bears that stamp. In order to make up for our misdoings in the past, we confess that we are using the aforesaid paper now, for the production of our picture each month, and up to the present time are delighted with our results. Recently we have made on it a number of whole sheet prints, from 20 x 24 negatives, and they are absolutely without a blemish. The whole sheet tones from corner to corner, and across again, with wondrous uniformity and ease. Only about twenty minutes are required to fume the paper (a decided advantage in cool weather), and the toning is absolutely easy. We have no especial formula for working it other than our ordinary one Lublished frequently. At some future time, we may give this formula again for those who may have missed it. Our advice now is—don't fail to try the "Hen, Pea, Hay," Messrs. E. & H. T. Anthony & Co. are the trade agents. All dealers keep it.

QUOTATIONS FROM THE WORKS OF MR. JABEZ HUGHES.

In the October number it was our painful duty to record the death of Jabez Hughes, Esq., of England, and to give a sketch of his life. We thought it only proper that this should be followed by a few quotations from a copy of a little book of his called The Principles and Practices of Photography Familiarly Explained. It has run through many editions. We believe it is out of print now; and, therefore, all the more valuable is the copy we have taken down from our library for reëxamination, and from which we quote what follows, as an example of a clear and concise method peculiar to Mr. Hughes for making known to the less talented, the information needful to them in the transaction of their art. We commend its careful perusal to all who may be so fortunate as to see it.

"ABOUT LIGHT, AND HOW TO USE IT.

"The preceding portion of this Manual has been occupied with the description of the proper methods of producing sensitive wet and dry plates. The pupil, being supposed to be proficient, will now have to apply this knowledge to a practical end; he may attempt portraiture, still-life, landscapes, copying paintings, or the thousand and one other applications of the art, but he will speedily discover that the most important thing he has to learn is the management of his light. On the proper management of it depends the chief success of the photographer. This is the most difficult part of the art to teach, because no absolute rules or exact formulæ can be laid down. He will also have to learn, on this subject, that no reliance is to be placed on lens, camera, and chemicals. These, valuable enough in their places, can teach him nothing here. He must go to the fountain head-light itself. Whatever light falls on, it enlightens, whitens. White is the representative of light; black, that of darkness. If an object be wished to be represented white it must be placed in the light; if black, the light must be excluded from it; if partially white and partially black, the light must be allowed so to fall on it that, while the parts that are to be represented white must be illuminated, the others that are to be black must be protected from illumination.

"These principles-almost too simple to be gravely stated-contain all that is meant by 'management of light.' They apply universally to landscape, architecture, portraiture, and everything else. Before a photographer proceeds to take a picture he should settle in his own mind what sort of picture he intends it to be, and not wait until it 'comes out' to see if it will 'do.' It is too late then. A man should definitely start with a fixed idea in his mind, and let his work carry it out. For instance, if he admire in portraits a broad, bold style, where the lights and shades are strongly marked, and the whole picture very brilliant, let him arrange his light so that the sitter has the light falling on him in that manner, and then aim, by camera and chemicals, to copy accurately his illuminated model. If a soft and delicate picture -where half-tone abounds-be preferred, let the light so fall as to show these halftones on the face of the sitter. Then, as before, let mechanical photography do the rest. But the first and primary condition is not to expect, by any modification of mere photography, to produce the effects that are legitimately due to light. For example, if a sitter have the light and shade strongly shown on the face by the arrangement of the light, although an under-exposed or an over-intensified negative will exaggerate the same, yet an over-exposed or under-intensified one will not make a soft picture. In like manner, if a sitter be lighted very uniformily, though an underexposed picture will increase the contrast, yet no management of chemicals will make it a brilliant one. The point wished to be insisted on is, that the effects due to arrangement of light should be considered quite distinctly from the effects of manipulation. A photographer can do much by both the one and the other; but he should

not confound the two, or, still less, call on one to supply the shortcomings of the other.

"If the idea be distinctly recognized, that as the light falls on an object so is it represented, the question of its 'management' is very simple; for the lens may be regarded as an eye, and as capable of representing objects with the lights and shadows only as sees them. The photographer can, therefore, by the use of his own eye judge of the effect that his lens will see, and he may take the photograph or not, according to the suitability of the light. In out-door photography this is of the greatest consequence, for some views are best illuminated early in the morning, others late in the afternoon, and some only about mid-day.

"In indoor work the photographer may be supposed to have the light under his control; then it is a question of placing his sitter or object nearer farther from the window, as well as the arrangement of curtains and blinds.

"The primary idea, however, is, before taking any photograph, to observe how the object is lighted, and to take this into consideration as of equal importance to the exposure the plate will receive, or the development that will follow. If the question of 'lighting' be regarded in this true, yet simple manner, the photographer has the key to the whole subject, and all the rest depends on his taste in using his knowledge."

IN THE MATTER OF THE LAST CONVENTION.

I HOPED with an unfaltering trust that the P. A. of A. would put themselves on record at this Convention, in regard to this most unpleasant subject, price, but I am sadly disappointed. When President Smith was in the chair, I addressed a communication to Secretary Bebee, and he sent it to Mr. Smith, but that was the last of it. When President Bebee was called to the chair, I worded things differently, but that went by the board without any notice being taken of it, other than a pleasant letter from Mr. Bebee. This year my financial condition was such that I had to give up the fight at so long a range, and have devoted my

time to home rule. So I trust you will pardon me for taking the liberty of interesting part of the photographers of this town in having published some good things from your valuable journal, and trust there will be good come from it. As you have commenced the good work in earnest, let the ball be kept moving, and I feel the right will prevail in the end. You will notice by the paper I send you, all the photographers in town but one, have endorsed the spirit of the communication, and he lowered his price, as the trial became greater, from five or thereabouts to three, then to two and a half by agent, so in reality he only gets two. He seems to be like the man at an auction, who bid against himself for fear his other self would get it.

I feel Mr. Blessing deserves our grateful thanks in persistently taking a stand that it is the duty of us all to do individually.

If we could all get where we could do conscientious work with a fair recompense, we could keep up our end of the line in furthering the interests of the P. A. of A., but as it is unless the people are educated to an understanding of what is due us, there will necessarily be a dropping out of the members through lack of means to support that which is for the universal good.

I am glad to see there has been some change in the officers of the Association as it seems, but not to keep those who are well started in this world's goods in high positions that they may profit by it in sustaining their influence among their aristocratic customers by the honors conferred upon them by the lesser brethren, who look to them for good, but of whom the poor photographer cannot expect much. If there is any honor in it, the Vice-Presidency, pass it around, and give those who need a helping hand a little honor, and not continue the same in office for years, or if you choose add two extra from each State, and drop them every year to make room for others. No, I will not be so uncharitable, as they have done much, for it is money that keeps all things in motion and advances every science, as well as makes it comfortable to live,-a lesson few of us learn until necessity pinches us, and makes us aware we are without our best friend.

The extracts from your little leaflet put new hope into me, as it most assuredly will all drowning rats, for they see a haven of rest in chin music, when their customers confront them with. "So and so makes them for half what you do, and I never heard of such a high price as you put upon your work."

I am sure there will be a kind rememberance of you and your work among us of this day and generation, after the heat of the battle is over, for having led us to pleasant camping grounds; and Mr. Ryder will not be forgotten for stepping down to greet us, in words that will make us step to the front if we heed them; one and another grasp us by the hand to help us on if we will but go; and thus the stronger in their might make the path of the weak brighter as they sink in the mire of despondency, when but a little more courage would have kept them on sure footing, as all who succeed testify. And now, my dear friend, please find enclosed fifty cents for Robinson's new book on Picture Making, as he seems to have a gift of letting us see when we thought we were blind.

It would also gratify me to receive a copy of your new leaflet, and if you should send me four, I should be most pleased to hand a copy to each of the others in town.

I send herewith a few samples of my backgrounds and accessories, which I have made, thus keeping me busy and enabling me to keep up my price to something of a fair figure.

And now, my dear sir, believe me to be one who works for others good as well as my own.

Yours truly, M. H. ALBEE.

HENRY T. ANTHONY.

"The splendors of the firmament of time
May be eclipsed, but are extinguished not;
Like stars to their appointed height they climb,
And death is a low mist which cannot blot
The brightness it may veil———.

It is so with the memory of Henry T. Anthony. The nobility of character, the honesty of purpose, and the many marked traits of amiability, pure and simple, which

characterized the whole course of his long and eventful life, will outshine the brief clouds which death for a moment may gather around his honored name. Not only with his personal friends and within the circle of his compeers in intellectual capacity, where the sympathies of most great minds are confined, was that genial disposition and goodness of heart manifest, but, like the sun, it was universal in its largess—shining upon all.

Among the many testimonials to his memory, of respect, honor, and love, there is none more full of force, or which shows better the native goodness of his heart, than the letter written by a little flowergirl, whose acquaintance Mr. Anthony made at Richfield Springs. The flowers alluded to were received by Mr. Anthony, and the letter was written, as will be perceived, on the day of his death.

RICHFIELD SPRINGS, October 11, 1884.

DEAR FRIEND: I sent you a box of pansies some time ago, and I have not yet had time to write you, as I have been so busy with my studies. I hope you will not be offended at a little flower-girl taking such a liberty as to send you a box of pansies.

Mr. Anthony as you have been so kind to me, I wanted to show you in some way that I appreciated your kindness, but as the frost came on much sooner than we expected, I did not have flowers enough to send you a larger box, but I will remember you in the spring, when the forget-me-nots blossom, as they are much prettier then than at any other time, and I will send you a nice box of them.

I have been to school every day this fall, since the middle of September, until to-day, and I am not well at all. I study the Fifth Reader, Practical Arithmetic, Intellectual Arithmetic, Swinton's Speller, Swinton's Highest Geography, and Grammar, and that is all, but mamma is thinking about have me take German lessons, though she is afraid it will be too much for me, for I am inclined to headache, and she thinks it may be better for me to wait until next winter, but if I want to I may, and I am quite sure I will. It looks very gloomy around here now, and all the boarders have

gone away, and we have had several heavy frosts since you left, and we will very soon have snow. Then I will be glad. I cannot think of anything more to say, so good bye

From your friend,

MAGGIE BOLTON.

This entering into the sympathies of a child so as to win her confidence and love, reflects the kindness of his disposition and the geniality of his nature.

As a man of science, Mr. Anthony was broad and philosophical in his views, yet, like all great men, modest and unassuming. The good of science alone was his object. No selfish motive stained the high reputation which he had attained both in this country and abroad. As a keen thinker, he had few equals in his profession. Familiar with all the details of the art, a man of practice as well as of theory, he knew the difficulties encountered by his colaborers, and. with rare generosity, imparted knowledge from his abundant storehouse.

Who can look upon his noble countenance, and mark the lines of benevolence and purity of soul mirrored there, and not feel inspired to emulate his character. Who can remember his reputation, and not strive to live as he did, and to die as he did, with that which should accompany old age—"honor, love, obedience, troops of friends."

FALL LANTERN EXHIBITION OF THE SOCIETY OF AMATEUR PHOTOGRAPHERS OF NEW YORK.

On the 30th ult. the first fall lantern exhibition of this Society was given at their rooms, No. 1262 Broadway. Despite the disagreeable, rainy night, there was a large attendance, several ladies being among the audience. Mr. William T. Gregg kindly furnished two of his lanterns, and successfully manipulated the same. A variety of slides were shown.

Mr. Randall Spaulding exhibited a series of Arizona and Colorado views made by him a year or two ago on a geological and botanical trip west, some of which were admired for the grotesqueness of the scenery.

Several slides from negatives made by

Mr. R. A. C. Smith with the detective camera, were interesting and life-like.

Mr. E. L. Wilson, of Philadelphia, contributed four slides of the exhibition buildings at New Orleans. Their mammoth proportions were clearly shown.

Mr. George Rockwood had some wetplate slides from negatives of interesting bits of scenery around New York, which were good.

Some of the best slides of the evening were those contributed by Messrs. James B. Metcalf, James E. Brush and Mr. D. Wright. Mr. Metcalf had used Anthony's transparency plates, the others Carbutt's albumen and A plate.

Views of Mr. Munn's rustic bridge at Llewellyn Park, and the entrance to the park, by Mr. Metcalf, were commended for their clearness.

Messrs. Brush and Wright's views around Seabright, N. J., of some of the fine residences at that point, and of bathing scenes, were particularly admired.

Several slides were contributed by Mr. Levison, of Cooper Union, which comprised instantaneous views and groups.

Mr. R. Baker furnished slides of church architecture which elicited favorable comment.

Mr. Newton supplied a number of slides made on his bromo-collodion emulsion plates.

Some of the prettiest bits of landscape work was shown in slides by Mr. W. H. Bartholomew. He also exhibited a slide from a negative made by contact with a steel engraving without a camera, which was very distinct and clear.

The lantern afforded much instruction to those who were beginners at lantern-slide making, as they were enabled to judge of the necessary requisites required of a good slide.

Among the audience were several prominent gentlemen, including Mr. York, a member of the British Association of Science, and a large manufacturer of lantern slides in England.

In conversation with President Beach, he remarked that he had secured some three hundred negatives of American scenery and other points of interest during his stay here, and that his establishment turned out eighty thousand slides annually. He promised to send the Society, on his return to England, a series of slides from his negatives of points in and about New York, and before his return he would endeavor to be present at one of the Society's meeting.

The exhibition passed off very pleasantly, the new arrangement of the seats under the mangement of Mr. H. V. Parsell, being quite satisfactory to all present.

The Society is to purchase a lantern of its own very soon, and a competitive exhibition of lanterns by different manufacturers is talked of. A proposition to inaugurate an exchange of lantern slides among the various amateur societies, is to be considered.

OUR PICTURE.

A TRUE feeling for the charms of infancy characterizes the works of the greatest painters. Indeed their method of dealing with childlife is often a measure by which to gauge their abilities.

The native simplicity and unassuming grace of these little dwellers upon the threshold of life offer tempting opportunities for the display of their powers.

In Gainsborough's "Shepherd Boy in a Storm," the unconscious simplicity of the boy's expression, looking up with hands pressed and in timid wonder, produces a delightful impression. And who has not been charmed with Murillo's "Beggar Boys," or felt a feeling of love enkindle at the sight of the infant Christ in the arms of the Madonna of Raphael.

Sir Joshua Reynolds's fondness for children is seen by the number of children's pictures he made. There is a beautiful picture by him of a child caressing a dog, which one never tires looking at, because it We are told is a true reflection of nature. that the father and mother of this little girl invited Sir Joshua to dine with them, that he and the child might become acquainted. The child sat next him at the table, and the great painter amused her so much with tricks and stories that she thought him the most charming man in the world, and the next day was delighted with the proposition to be taken to his

house, where she sat down with a face brimful of glee, which he caught at once, and impressed upon the canvas.

Gainsborough's barefoot child on her way to the well, with her little dog under her arm, is familiar to many. It has not its equal in the world.

It is just by entering into sympathy with children that we gain their confidence. We must become children ourselves, therein lies the secret of the successful painter or photographer, in child studies. Children are no respecters of persons; rich and poor are alike to them, but they are well-known observers of human nature. They seem to have an instinct by which they tell the real from the assumed. It is not every photographer, therefore, who succeeds so admirably in giving expression to the feelings which animate a child's countenance as is witnessed in the series of excellent studies before us this month.

Messrs. Arthur & Philbrick, of Detroit, Mich., have succeeded in translating the charms of a cute little piece of humanity to paper, for the delight of our numerous "Little Wee Wee," as he is readers. called, will have a wide journey, in our magazine, over the world. He will visit the far distant shores of India and China, travel from Newfoundland to Australia, to the sunny homes of England, France, Germany, and Italy, and throughout the broad extent of our own land, but wherever he goes we are sure he will delight everyone with his simple beauty. Messrs. Arthur & Philbrick deserve praise for the skill they exhibit in portraiture. There are much softness and harmony in the tone, and detail in the shadows, nor are the high lights too glaring and obtrusive, but blend gradually into the darker portions with fine effect. The lense is the celebrated Suter lens of Messrs. Allen Bros., Detroit, and the prints before us are evidences of its capacities, showing its depth of focus and clearness of delineations.

The negatives were upon gelatine dry plates, and the prints were made upon the celebrated N. P. A. albumen paper of Messrs. E. & H. T. Anthony, New York, whose brilliancy and keeping qualities are unsurpassed.

A DISCUSSION ON PRICES.

(Continued from page 325.)

X.—To BE CONTINUED UNTIL THERE IS REFORMATION.

"When there is a will there is a way," only when the body is large the will must of course correspond, in order to have the requisite power to open the way and force the main body along. The photographic body of the United States is a corpulent mass needing an enormous power to move it along the correct road to good prices, but that power can be generated, and would be in a single day, providing we could all meet, arrange schedules, and vote; but as this cannot be, the next best thing is for our various journals to unite in whooping up the price business. No one journal reaches all; -probably all together do not, but if all the journals unite in the call for graded prices, enough of our fraternity can be reached to fix these prices, and get the controlling element to fall into line and make it so disreputable and unpopular to cut, that few will have the hardihood to do it.

I believe in a full round figure for cardssay three dollars or three dollars and a half per dozen, and a low one for cabinets-say five dollars, then, in the majority of cases, the larger size will be chosen. larger sizes a good price should always be demanded-eight dollars for boudoirs, and in the same proportion upwards. prices and no trust, should be the motto of all, while good work and good nature should be the main motive powers to draw custom. Public sentiment and feeling among photographers must be built up before a general reform can be realized, hence all our journals and local societies should make a grand effort-a prolonged and continuous one, no spasmodic affair-towards this end. It is better for all concerned to have a good price for a poor picture than vice versa, and he who is well paid for his work will not only try to improve, but will also have the wherewith to do it. R. E. Wood.

ST. HELENA, CAL.

Dr. M. B. Connell, of Wauwatosa, Wis., says, "I have a copy of your work, Wilson's *Phototographics*, and I think you know about all there is on the subject, judging from its contents."

PRACTICAL NOTES ON EMULSION WORK.

BY RANALD DOUGLASS.

Since writing articles in the *Philadelphia Photographer* on my method of making home-made plates, I have had occasion to experiment further, and cheerfully give to the craft these results, hoping abler experimentalists will give us their experiences.

It is difficult to make one's own gelatine plates at first, but if the operator is endowed with a little persistent perseverance he will speedily gain such experience as will make it a pleasure and profit to make his own plates. I have now dropped albumenizing my plates, as it is very difficult to flow emulsion over albumenized glass, I now use silicate of potassium-a dram to twenty ounces of water. Clear the glass as usual with acids; wash under tap, and flow twice a filtered solution of silicate, as above, over the plates, and let excess run down the sink; rear up to dry. Emulsion flows over plates so prepared exactly as does varnish. Let excess run back into coating-pot. I use a common earthenware teapot, and I find it most convenient. Emulsion adheres firmly to silicated glass. If your emulsion is spoiled, it will frill no matter what substratum you use.

I formerly used two hundred grains of gelatine to boil with, but I now use one hundred and twenty grains instead, and find no difference in resulting intensity, while the physical property of the finished emulsion is better. After boiling and cooling, I add five hundred grains of gelatine.

In the early days of my career in emulsion-making, I was always troubled with black spots and specks and pits in film, but now, thanks to Dr. Vogel for suggesting the washing of the gelatine several times before dissolving for use, the spots disappear. Not only this, but also keeping emulsion a full week before use, helps to do away with spots. Capt. Abney affirms that emulsion increases in sensitiveness by keeping. My experience agrees with his, though it opposes his experience that hard gelatine is adverse to density. I have used both hard and soft gelatine, and cannot recommend soft gelatine, as it does

not give intensity with me, besides it is very difficult to develop plates made of soft gelatine when the weather is at all warm. The pictures melt and run off, which does not happen with hard samples. For formula and mode of operation, see *Philadel-phia Photographer*, of August, 1884.

For a developer for the emulsion above mentioned, I find the best yet to be what is known as Hoover's developer.

No. 1.

Pyrogallic Acid,		. 1	ounce.
Ciaria Aria			grains.
Sulphite of Sodium,			ounces.
Bromide of Ammonia			grains.
Water to make up to	ш,		ounces.

No. 2.

Carbonate of Potassium,	3	ounces.
Citric Acid,	60	grains.
Sulphite of Sodium, .	2	ounces.
Water to make up to	12	66

For use take a drachm of each to every ounce of water. More of No. 1 will restrain; more of No. 2 will accelerate. A few drops of a ten per cent. bromide of potassium solution will increase intensity. More bromide if hardness is wanted. Slow development is the secret of intensity. I prefer soft negatives that will allow twenty-five or more to be printed a day. Soft or hard negatives can be made at will with the above developer, used with the emulsion spoken of.

The quantity of emulsion recommended will coat sixty or seventy plates, 5×8 size. The emulsion costs as much as the glass, and gives just as fine results as the bath plates.

I know very little about commercial plates, as I have made my own for over a year. I should pity the man who is at the mercy of the manufacturer. Making one's own plates is not difficult when once mastered. Try and see, and report to us in the journals. The more photographers take up the subject, the sooner we will all reach perfection in dry-plate work.

WE have received a sufficient number of PHILADELPHIA PHOTOGRAPHERS for July, 1882, in response to our advertisement, and shall therefore recall the offer which we made in the last number of this journal.

ON COMPOSITION IN PHOTOGRAPHY.

EVERY close observer of nature will notice the frequent repetition of similar attitudes. Herds of cattle by the water's edge, sheep on the pasture, crowds of men and women, children at their play, and even in inanimate nature—flowers, trees, clouds, and rocks—seem by their groupings to arrange themselves as if in obedience to some definite natural law. Moreover, it will be perceived that such congregations and groupings are generally of the most pleasing character.

Whether the law of attraction of bodies has a controlling influence in the production of æsthetic effect, we cannot affirm, but there seems to be some principle of definite arrangement in groups which occurs under similar circumstances. Now, we shall not enter into the philosophy or seek to divine the cause of the artistic effect, but only point out the principles upon which that effect depends, that they may be of service in the selection of beautiful pictures in nature.

No doubt these changes of attitude so agreeable to the eye, result from the desire on the part of the animals or men to assume positions most convenient for the accomplishment of the object for which they are assembled.

They will naturally take postures in which they are least constrained, and it does not require great acuteness of mind to perceive that ease of motion is necessary to beauty of attitude, and that all constraint is destructive of harmony in the general effect.

This first principle may therefore be established; that beauty of composition depends upon the freedom from restraint which is manifest in the arrangement of the actors in the scene to be depicted.

We are fully aware of the difficulties encountered in securing this ease of posture. In fact the difficulty is only increased by the endeavor to secure it. Some artists are perpetually searching for the most graceful attitudes, but never find them, simply because they have recourse to their own conceptions of what is beautiful and graceful,

or endeavor to confirm some fixed principles laid down by formal rule.

Nature here is our only infallible teacher. When unhampered and untrammelled by false art, she gives us the most pleasing forms—the most graceful, full of repose and beauty.

The story is told of Chantry, the celebrated English sculptor, that he once engaged to make a statue of some great living statesman. Full of the desire to produce something that would outlast his time, he made a number of plaster casts from the model, in a variety of attitudes, but could not be satisfied with any. They seemed constrained and unnatural. At last his model becoming wearied with the operation to which he had been subjected, leaned upon a pillar in the room, in so graceful and natural an attitude that the sculptor cried out in rapture, and besought him to remain as he was until he secured the pleasing pose. Casts of all these figures remain for our instruction, and the vast superiority of the last is manifest to every one possessed of artistic feeling.

The lesson from this is not that the photographer should weary his sitter until exhausted nature assumes her easeful attitude, but that he should strive to so pose as to be in conformity with nature, and avoid all apearance of restraint by relieving his subject of all constraint.

Another governing principle in composition is the unity in the grouping, which is produced by the one intention or idea which animates the whole.

In the formation of a picture each of the actors, as in nature, should contribute a share to the general effect, and if this representation of the idea is properly conveyed, there will be no necessity of conforming to set rules. There will be no need of balance of lines or arrangement in pyramidal forms, or any other device to produce pictorial effect. There will be a natural balance of line—an arrangement according to definite principles. The picture may assume a pyramidal form, but it will flow naturally from the subject itself. Every line becomes a line of beauty from situation and contrast.

Although we trace much of the pyra-

midal growth in Hogarth's great works, I do not think he purposely constructed his pictures upon that principle. There is never any appearance that it was introduced as an object. It is never obtrusive; we do not know it is there until we search for it. His crowds, and he evidently delighted in their representation, are managed with consummate skill. You cannot take anything from his pictures without destroying the harmony. In all his compositions he courts the favor of the eye by the harmonious effects produced by the unity of design. Every variety of object and shape are linked together, but without the slightest discord, because there is not a single object amongst the multitude which does not contribute its share, no matter how small, to the general effect.

It is not necessary, as we are sometimes told, to make every figure in the group perform some action. Such groupings often have an unpleasant effect, from the evidence they give of the constraint on the part of the artist to set his actors at work. If general activity, or the employment of each figure in the group, in the performance of some task, is not necessary to the story told by the picture, it is out of place. It may be necessary to have some of the actors passive, or represented as having no interest in the scene.

I remember seeing in one of those wonderful cartoons of Raphael, "The Beautiful Gate," this very idea carried out. The great artist represents the assembled crowd deeply interested in the scene, as if eagerly waiting to see the effect of the inspired apostle's words upon the cripple, but with great skill and truthfulness to nature, he paints the little boy pulling at his grandfather's girdle, impatient at the delay, wholly unconcerned about the incidents which occupy the attention of the old people in the group. And in the "Sacrifice at Lystra," the two beautiful boys placed at the altar to officiate at the ceremony are too young to understand what is going on around them. One is examining with childish interest the pipes on which he is playing, and the other is anxious to have some fun with the ram which is being led to the sacrifice. This indifference to the general excitement on the part of the children, is an evidence of Baphael's truth to nature and his freedom from set rules of art. An inferior artist would have represented these children as mere actors in the scene, and have praised himself for having achieved unity of design.

We could multiply examples, but one more will suffice.

The boy mourner in Hogarth's picture of "The Harlot's Funeral," winding up his top, is, as Charles Lamb naively puts it, "the only person in that assembly who is not a hypocrite."

Another principle demanded by effective composition is clearness of conception. The eye should never be misled or confused even in the greatest masses. Every subject should tell at once for what it was created. Obscurity is damaging to effective work, but no object should speak so loud as to prevent us enjoying the general effect.

Clearness will naturally follow the observance of the other principles of repose and unity, but nothing can be secured by a slavish conformity to fixed rules, or by rigidly obeying a system of balance of lines, but by close observance of nature in her best moods, conforming to representations bodied forth in our everyday life.

By building up a picture on any rigid system of lines or forms, we shall degenerate into a mannerism which will only be unpleasant in its effect, but by going to the great teacher, nature, we shall "learn her manner, and with rapture taste her style."

MOUNTS AND THE MOUNTING OF PHOTOGRAPHS.

THE mount, perhaps, bears very nearly the same relation, from an artistic point of view, to the photograph as the frame does to the painting which it encases.

As the painting, no matter how great its merit, has its beauties more effectively set forth by the taste displayed in the framing, so the photograph, though it may be perfect in detail and glorious in its gradations of light and shade, soft in its finish, and artistic in its conception, will not produce as favorable impression as when it is

mounted upon an appropriate card trimmed and burnished.

There is much affected simplicity in the world, much talk of nature unadorned, and of the excellency of things in themselves; but I do not think any artist who valued his productions would risk them at an exhibition without suitable frames.

There is much chance for the display of taste in the selection of appropriate frames. How often do we see a good picture injured by bad framing, and, we need not add, how many an excellent photograph is ruined by the bad taste displayed in the selection of the mount!

Taste has much improved of late years; the gingerbread and scrollwork mounts of the days that are past, I hope, have gone to feed oblivion, but there is still room for improvement.

With few exceptions, a photograph is most effective when mounted upon a plain board: white or some neutral tint not too decided in color.

It may happen sometimes, as in landscape photographs, that the white portion of the picture, by being less white than the mount itself, are injured by contrast, here a border of India tint immediately around the picture would prevent any injurious Dark olive-green and chocolate mounts are sometimes employed, and if the margins are not too great, are effective as a relief against the whites of the photograph. There is, however, a caution to be remembered in their use; if the paper upon which the photograph is printed has become thin by using too much soda in the toning, the dark portion of the mount will shine through the thinner parts of the paper and make a mottled, unsightly appearance when any pressure is used in burnishing. This defect is very apparent when vignette pictures are so mounted.

As regard the shape of the mount, the usual square-cornered card is perhaps the most artistic, except for small pictures, when the round-cornered style is admissable. There should be nothing, either in the shape, color, or decoration of the mount, to withdraw the eye from the photograph itself. Good taste is often put to hard straits by the caprices of fashion in

the shape of mounts. What can be more ridiculous than to see the smiling face of a fair damsel looking at us from the centre of a cross, or occupying the middle of a star, or locked up a prisoner, in the three lines of a triangle, or filling up the void of some heart, or incubating in an egg, or occupying the place of the man in the moon!

The palette, the circle, or the oval, may at times be effectively employed, but even here much good taste is demanded to secure a pleasing impression.

. The plaque, or depressed mount, for a time met with much favor, and, it must be confessed, that some very pleasing results were produced by its use; but it seems to have gone out of fashion.

On general principles, the simpler the mount, the more effective. A plain card can never offend, but will always please, a tasteful person, if the photograph is properly mounted; and here a word as to proper mounting may not be out of place:

First, you will excuse me if I give instructions as to best means of making the starch for mounting, because success in mounting greatly depends upon the quality of the mountant.

In our experience, we have found nothing better than starch paste. What can be more annoying than to have blisters appear or have the edges of the picture turn up when dry? But if the directions which follow are obeyed, no such trouble will occur:

Take about four ounces of the best starch, mix this in a china bowl with just enough water to make the mixture of the consistency of thick cream. In the meanwhile have boiling about twenty ounces of clean water in a copper or graniteware kettle; add the water to the starch, gradually stirring all the time and continue to stir until it thickens, then pour it into a clean bowl and let it cool. When cool, the skin which forms upon the top may be removed, and a beautiful clear starch paste will be had, perfectly free from lumps. It is well to put a sufficient quantity of prints in the tank. Let them thoroughly imbibe the water. Take them out and place them in bulk between blotting-pads, and use enough pressure upon them to drive out the excess of moisture. Lay any quantity upon a flat glass, face down, and paste the back well with a blending brush, going over the entire surface, taking care that every square inch is covered quite to the edge. The prints are next picked up with the point of a knife and laid upon the mount and immediately placed under a piece of paper and well rubbed down, to insure their complete adhesion, after which they are placed under blotters that they may not dry too rapidly and unevenly.

In mounting very large prints, it is best to paste the photograph in the usual manner and then lay it face down upon a blotter, which is so arranged that the centre of the mount, centre of the print, and centre of the blotter are in one line. The mount is then applied to the back of the print, pressed down, and the card and print lifted up and rubbed down in the usual manner In this way the danger of tearing the large prints is prevented and a greater number can be mounted in the same time than by the old method.

A word as to trimming photos before mounting: A great deal of the effect of a portrait depends on the position the figure occupies in the picture. It is generally best if the figure is not just in the middle to have more space before than behind. There is a tendency to giving too much space in front, so that the long train of a lady, for instance, may have its place in the picture; but this gives the appearance as if the figure was walking out of the scene. The nearer the head comes to the top of the picture the taller the person appears This fact may be taken advantage of in giving dignity to a short figure, and in landscape the mountains will appear dwarfed if too much sky is allowed in the picture.

The prints should not be allowed to become too dry before burnishing. It is essential that they be dry enough to prevent them being torn by the rollers, but if they are too dry they will not receive as fine a gloss. If they are surface-dry it will be sufficient.

The best lubricator to employ is ordinary white castile soap applied by rubbing a buffer upon the soap and then rubbing the print all over its surface. In large photographs it is well to soap the entire mount.

Have the roller and bed-plate of the burnisher well heated before running through the prints.

In burnishing enamel prints, too much pressure should not be used, but the burnisher should be a trifle hotter than with ordinary cards. Have the pressure just sufficient to allow the print to pass through with a slight resistance.

SOCIETY GOSSIP.

Photographic Society of Philadel-Phia.—Minutes of the stated meeting held Wednesday evening, November 5, 1884, the President, Mr. Joseph W. Bates, in the Chair.

The Treasurer presented his annual report, showing a balance in the treasury of \$696.74.

The Executive Committee reported that two second-story rooms, suited to the requirements of the Society, could be had at the corner of Fifteenth and South Penn Square.

On motion of Mr. Pancoast, the Committee were authorized to rent the same.

The annual election of officers was held, resulting as follows:

President.-Joseph W. Bates.

Vice-Presidents.—Frederic Graff and John G. Bullock.

Secretary.—Robert S. Redfield.

Treasurer .- S. Fisher Corlies.

Executive Committee.—Samuel M. Fox, Dr. Ellerslie Wallace, Jr., and Samuel Castner, Jr.

Excursion Committee.—Charles Barrington, Wm. Hacker, and Francis T. Fassitt.

Committee on Revision of Minutes, etc.— John C. Browne, George B. Wood, and Robert S. Redfield.

Mr. Alexander C. Campbell was elected an active member of the Society.

Resignations were accepted from Messrs.

D. Jones and Edward A. Casey.

A letter was read from the editor of the Amateur Photographer, published in London, stating that he had placed the Society upon their free list, etc., for which a vote of thanks was passed.

Two questions were found in the box:

1. Has it ever been tried or proposed to

soak gelatine negatives in a dilute solution of bichromate of potash after fixing and washing, with a view to give a hardened surface to the film upon exposure to light, thus increasing its permanency?

It was thought that alum would be more efficacious, and that a yellow hue might be imparted to the film by the bichromate of potash.

2. Can prints be taken from intensified negatives before varnishing, without injury to the plate, and if not why not?

Several members stated that they never varnished their negatives whether intensified or not. By the use of alum the film was hardened so as not to require varnishing, though if a large number of prints were to be made, it would be safer to varnish the negative.

Mr. Carbutt presented the Society with two bound volumes of *Snelling's Journal*, which were received with a vote of thanks.

The presentation pictures for 1884 were distributed to those members present, after which a lantern exhibition, mainly composed of pictures taken by Mr. Pancoast in India, was given. The exhibition was extremely interesting, and was enjoyed by all present, both for the excellent quality of the work, and the artistic beauty of the subjects. Dr. Howe showed a number of slides, among which was a very successful view of the destruction of one vessel by another, by the use of a spar torpedo. The picture was taken at Newport at the time of President Arthur's visit there last summer. Pictures were also shown by Dr. Jordan and Messrs. Wood, Burroughs, Bennett, and Redfield.

The Queen Dissolving Lanterns used, belonged to, and were operated, with the oxyhydrogen light, by Mr. Frank Bement.

Sixty-five members and visitors present.
Adjourned.

ROBERT S. REDFIELD, Secretary.

PHILADELPHIA AMATEUR PHOTOGRAPHIC CLUB.—A stated meeting of this Club was held at their rooms Monday evening, November 17th. Owing to the absence of Mr. Roberts, the President, Mr. Cunningham was appointed temporary Chairman. The meeting was called to order by him at 8.30 P.M.

A resignation was read from Mr. H. L. Roberts, the former President, in which he stated "that being compelled to leave the city for an indefinite period, he was forced to tender his resignation from the Club." His resignation was accepted with regrets, and Mr. A. Cunningham was elected to fill his place as President. The recent death of Mr. J. Frank Gaskill, one of the founders, and also the Treasurer of the Club, was announced. A committee was appointed to draw up a resolution of regret to be sent to his mother, with the Club's sincere sympathy at her recent loss. Mr. Alfred Thompson was elected as Treasurer to fill his place

A recess was then taken, during which some lantern slides, from negatives made by members were shown. Mr. Clements also gave a very excellent demonstration of "platinotype developing." This was the most instructive feature of the meeting, the members appearing to be much interested, some of them trying their hand at developing.

The prints were from negatives made by Mr. Clements, and showed much artistic feeling in choice of subject. During the evening Mr. Cohen exhibited some prints, among which several portraits may be mentioned as being very good examples of what may be done in portraiture without a skylight.

The meeting finally adjourned about 11.30 P.M., after a very enjoyable evening.

W. WEST RANDALL, Secretary.

Association of Operative Photographers.—November 5, 1884, 392 Bowery. President Buehler in the Chair. Minutes of last meeting read and approved. The Philadelphia Photographer and other journals received with the thanks of the Association. Correspondence read.

Mr. Buehler: Mr. Duchochois, who is one of the oldest photographers in the city, and also well known for his literary efforts, has kindly consented to give a number of lectures on chemistry in relation to photography.

Mr. Duchochois: The first lecture is nearly ready, and I will deliver it at the next meeting. I shall try to make them all as interesting as possible, that those who have

not studied chemistry may be induced to do so. Chemistry is part of the knowledge that all photographers should possess.

Mr. Buehler: We are much obliged to Mr. Duchochois. The benefit derived from a proper understanding of photographic manipulation, is certainly worth all the thanks we can give you. It is not merely to work certain formulas, but to know the reason why, and to help us to work understandingly. I think it is well to call your attention, Mr. Duchochois, to the treatment of the silver bath. The keeping a silver bath in good working order is not well understood by all. Every one has a notion of his own. If you can give us a good method of doing it, you will do us a great favor.

Mr. Duchochois: That will come in the lectures. I intend to explain, as far as my knowledge goes, the various reactions which take place in the compounds which we use in photography. Incidentally, I will say the causes of the defects in the wet collodion process comes from the silver bath in most cases, the developer and collodion being rarely at fault with good formulas.

Mr. Buehler: It would be a great benefit if you were to give us your experience in treating a bath properly. I went through all the methods prescribed in the different treatises on photography, and I found there were so many diversified opinions on the subject, that a beginner is at a loss to know what to do properly. Some peoplesmile at the idea of fusing a silver bath. Monckhoven recommends it. As soon as the silver is fused I think it is time to stop; if carried on further, decomposition will take place. I think the occasional fusion of the silver bath, if done properly, is to the point.

Mr. Schaidner: I would like to ask Mr. Duchochois as to the amount of acid necessary in a bath to give good results. Is it better neutral or with plenty of acid?

Mr. Duchochois: I have never been able to make pictures with a bath quite neutral; with an alkaline bath it is out of the question. The amount of acid to use depends on the state of the collodion, and on that of the silver solutions. The iodide and bromide of cadmium are seldom sure compounds, and the collodion, if made with these salts,

should have undergone a partial decomposition, shown by the liberation of iodine, to work without fogging. Supposing your collodion, no matter how it is made, is old enough to show decomposition by being discolored, the amount of acid in the bath may be very small to prevent fogging. But if the chemicals have a tendency to work white and black, you require a good deal more acid; there is no hard and fast rule by which a photographer can go. By use the bath becomes contaminated with organic silver compounds more reducible than the nitrate, which induces a dense reduction in the whites, and consequently a want of detail both in the lights and shadows. The remedy is, then, to evaporate the bath to dryness, and fuse the residue. But before so doing, the solution should be slightly acidified with nitric acid, and the fusion carried on for a few minutes only, say five minutes, and even less, in order not to decompose the silver nitrate.

Mr. Schaidner: Is not permanganate a substitute for fusing?

Mr. Duchochois: I do not believe that the bath treated with permanganate will work as well after fusing, for the permanganate only acts on the organic matter, not on the compound formed by the reaction of ether and alcohol.

Mr. Buehler: Permanganate is merely a purifier in relation to organic matter. You can even overdo the treatment with the permanganate of potash. The collodion may be just as much at fault by being composed of impure chemicals. If iodide of ammonium is used in the collodion, you are apt to get an unstable salt in the bath that may form combinations which are harmful in many respects.

Mr. Duchochois: Lithium or sodium have the properties of ammonium without the drawbacks. Ammonium iodide is apt to be decomposed sooner in collections than any of the other iodides.

Mr. Schaidner: I have read that if fog on a plate can be rubbed off without disturbing the film, it indicates too much acid in the bath, and I have also read the contrary.

Mr. Duchochois: I think that when the fog is superficial and can be rubbed off, the fault, in most cases can be traced to an

organic silver bath, or to prolonged development, especially if the bath is much acidified. It has been said that the imperfection was due to a new colorless collodion, or nearly so, but I have not been able to ascertain in a positive manner if in all cases that was really the cause, having often found that the fog was then in the film.

Mr. Buehler: I have worked the silver bath slightly acid in order to get a clear negative, and, to convince a sceptic, increased the amount of acid, and obtained fog. If a good deal of organic matter is in the bath, it is very apt to produce fog by excess of acid. Why I do not know.

Mr. McGeorge: I remember some years ago, Mr. Black, of Boston, said he used an enormous amount of acid in his bath.

Mr. Duchochois: Mr. Black gave a description of that process at the Convention at Chicago. When I read it I could not account for it. I know Mr. Black by reputation and by sight, and he is a man who would not say anything untrue. I wanted to satisfy myself, and made a small bath and found that an excess of acid need not necessarily produce fog if the bath was in very good order. I tried it, but obtained a ferrotype or thin negative every time. Mr. Black may have prepared his collodion with guncotton containing a compound similar to nitro-glucose, and in that case he may have obtained good negatives with a comparatively long exposure.

Mr. Schaidner: When there is an excess of acid in the bath the negatives get thinner and thinner.

Mr. Duchochois: If there is a great excess of acid, you get a positive in consequence of the slightly impressed film and rapid developments, but seldom a good negative. I feel certain that the amount of acid in the developer has something to do with it too. In this demonstration of Mr. Black's I am not able to say what amount of iron and acid was present at the time. Not having sufficient acid in the bath may fog the plates. Harmony is needed between the collodion bath or developer.

Mr. Schaidner: If there was a rule we could go by—if we knew that we dare not add more acid, than will make litmus-paper distinctly red, we know that the fault must

lie with something else, and that it is as far as we dare go.

Mr. Duchochois, My bath is thirty-three pints of water. I add no more than thirteen minims of chemically pure nltric acid (the ordinary acid is very impure). The amount of acid does not show by the litmus-paper until after a few seconds have elapsed. When the bath has been used some time I am obliged to add more acid to obtain more delicacy in the shadows. The less acid in the bath the more contrast and want of detail there will be. Clear shadows, with high lights with no definition, are sure indications of want of acid in old baths.

Mr. Schaidner: Is it better to acidify the collodion or the bath if the negative is harsh?

Mr. Duchochois: If the bath is new; I would prefer to acidify the collodion with iodine or bromhydric acid. Mr. Henry T. Anthony, in speaking of that, told me he employed acetic acid. I tried it and found it was an improvement. Mr. Anthony made many improvement in photography, and was always ready to impart them to the public. The death of Mr. Anthony will be a great loss, not only to his friends and acquaintances, but to photographers in general.

Adjourned.

T. W. Powers, Secretary.

GERMAN CORRESPONDENCE.

Collodion vs. Gelatine—New Color-sensitive Process—Azaline Plates for Oil Paintings and Portraits — Eder's Orthochromatic Plates—Lectures on Photography in the New Technical High School.

We recently had a very interesting discussion in the Society for the Advance of Photography about collodion vs. gelatine. There is no question that the application of the gelatine process is gaining ground upon the collodion. Herr Ruckwardt, for example, who for two years was a zealous champion of collodion, now employs gelatine plates for landscape and architectural work, and has obtained most excellent results. In another branch, however, there is still a preference to collodion; namely, in reproduction processes. Here collodion plates have a decided advantage,

inasmuch as the labor in the dark-room with them is less than with gelatine plates, as Mr. Angerer has already demonstrated. The long exposure with collodion plates when oil paintings are copied is annoying, but then we can have recourse to sunlight and in this manner the less sensitive collodion process can be advantageously employed. The time of exposure in direct sunlight is ten times as quick as with diffuse light. Mr. Quidde, who has made many reproductions of oil paintings, remarks concerning diffuse light, as follows: "With large subjects, no wonder the exposure is frequently of one-half to one hour's duration. Here the color-sensitive collodions which are six times less sensitive than common collodion would demand a much longer time. In diffused light, therefore, gelatine plates are indispensable." He would have employed them had he been assured of their durability. But as the subjects he took were from objects of a collection, and required the plates to be kept unchanged for twenty years, he could not venture to employ them, as it appeared doubtful whether the present plates would fulfil the conditions. This doubt is not fully justified. It is well known that a wellfixed and thoroughly washed gelatine negative is just as lasting as a collodion plate.

The results of the color-sensitive plates (Isochromatic) are attracting more and more attention. The Photographic Society here, our first reproduction gallery, now employs my eosine plates (the formula for which I published in the spring) for the reproduction of oil paintings on a large scale. They have taken the whole Brunswick gallery, and the results obtained are admirable. Old reproductions of works of Rembrandt, Oestrade, Rucksall, etc., which gave no results with ordinary collodion, gave the best results with eosine collodion. They were all taken in direct sunlight through a yellow glass. Mr. - expressed himself that now all the paintings which had been photographed by the old process should be rephotographed by the new. The application of the color-sensitive collodions will no doubt present difficulties, inasmuch as long exposures might cause a drying of the plate, therefore, the dry azaline color-sensitive plates are preferred by most photographers,

as they do not present the least difficulty. But as I am the inventor and discoverer of these plates I would rather somebody else should speak of their good qualities, therefore hear the opinion of Mr. Scoliak, of Vienna, who sent here recently a number of interesting views upon azaline plates and ordinary plates. The originals were chromolithographs representing the Midnight Sun, which showed a flaring red sun with flery clouds. In the prints from collodion and gelatine negatives the sun did not show at all, and the reflection in the water was bluish, the clouds could not be recognized. Even the use of vellow glass did not change the appearance, whilst eosine plates reproduced the sun and clouds with good effect. But very instructive were the views of Mr. Scoliak, inasmuch as the times of exposure were given. For collodion plates without the yellow glass it was fifteen minutes; for over-exposed azaline plates behind double yellow glass, 12 minutes. Of very great importance is an experiment of Mr. Scoliak's, the application of azaline plates to portraits. His subject was a brightly uniformed officer; the time was only three times greater than an ordinary plate. It represents an officer of the Hungarian Guard, all the apparel was very brilliant: red trousers, blue coat, etc., bedecked with silver, and the boots yellow, and yet the azaline plates translated these colors true to nature, whilst the pantaloons, etc., appeared dark with the ordinary plates. To increase the interest in color-sensitive plates I may mention that Dr. Eder is at present preparing color-sensitive collodion plates which he calls isochromatic plates. He has obtained excellent results. plates are more sensitive to green, but less sensitive to red, than mine.

To-morrow the spacious rooms of the Technical High School will be formally opened by his venerable majesty the Emperor, in presence of the great men of the realm and those interested in science, art, and industry. Instructions will begin a few days thereafter. I am inquired of from many sides in what manner the instructions will be given. I answer, it will differ as to the choice of the practitioner. The simplest course is the practice of Lichtpaus, the operators do not enter the part devoted to

negative process, but are confined to the copying of paper for blue processes, ink processes, and silver processes, and the preparation of the copies. The department is intended especially for architects and engineers, as many extend their studies further and take a longer course to learn the preparation of the Lichtpaus paper. The course for negative and positive processes is more complicated. Here a season with two weekly exercises is taken. Many are content with learning the dry negative process and the silver positive process. Others who dip deeper, study the collodion process, and study in connection the dry method, the silver process, the platinum process, the pigment process, etc. For the primary study of all photographic processes and their application to art, and science, and industry two lessons are generally taken. This comprehensive plan of study is not necessarily taken by those who desire only a deeper knowledge of photography and photographic interest. The initiated are absolved from preliminary studies, and may labor in the Phototype Lichtdruck, view photography, and enlarging (electric light). meet these demands, Prof. Dr. H. Vogel, in addition to the general course has a private course in which the æsthetic element finds a place. The participators in this course, which is not less than six months, are also students in drawing and art schools, and the retouching school of Herr Kopk, where they receive the necessary education in art and technique, which is considered so indispensable to a first-class photographer. The greater number of the gentlemen who study in the various departments are amateurs, and there is no question that 'the facilities afforded by dry plates will increase the My views of the bearing of number. amateurs towards the art I have already H. W. VOGEL. made known.

BERLIN.

TWO SUPERB SERIES OF PHOTO-GRAPHS.

I THINK it may safely be said that the greatest art is that in which the art is concealed. We undoubtedly enjoy a picture far better when, by study, we are able to

appreciate fully its excellences, whose beauties are not exhausted at the first glance, but grow upon us, taking deeper and deeper root upon our feelings. This is the impression produced by the collection of photographs which Mr. H. P. Robinson, of Tunbridge Wells, England, has had the kindness to send us to feast our eyes upon.

The name of Robinson will always be associated with his delightful books, *Pictorial Effect* and *Picture-Making by Photography*; but he is not a mere book-writer, a closet-student, who lays down rules for the attainment of artistic effect, without the power of carrying his doctrines into practice.

No; his excellent work is before us, and the more we gaze upon it the more we are convinced that photography can achieve anything, provided the soul of the artist guides the camera.

The pictures consist of a series of landscape views in the beautiful country of Wales.

We shall very soon give our readers an opportunity of seeing these pictures, and a talk about them; but just now we cannot help a passing glance at their charms, at the natural grace and freedom from all restraint in the animated groups which tell the story of the picture, the vigor of conception in the disposition of the lights and shades, the softness of the atmospheric effect which gives beauty to the distance, the harmony of the design in which each figure plays its essential part, the natural simplicity of expression, the truth to nature in the translation of the skies and clouds which have their proper distance and height.

Add to all this the charm of technical excellency, and you will not wonder that we are rejoiced to be able to give you these pictures for your pleasure and instruction.

We had hardly ceased looking at these pictures of Mr. Robinson when we were again delighted with another series, this time from our own country, from California, kindly sent to us by Dr. Passavant, of San Francisco. They represent instantaneous views in and about that beautiful region of country, and are entirely the work of amateurs, from the exposure of the negative to the finishing and mounting of the prints.

They possess a high degree of artistic

merit and bear testimony to the general feeling for art which is diffusing itself amongst photographers in this country.

The artists—for they well deserve the title—have waited for that favorable moment in the conception of their pictures when the individual parts have so grouped together to produce the most pleasing effect.

It is not every one who is able to perceive these moments, and hence every one cannot achieve the same beautiful results.

Most instantaneous pictures are the result of a happy combination of circumstances, but these bear evidence to a patience and a skill in selective ability, which are rare. We shall dwell further upon the merits of these views when we shall have an opportunity of showing them to our readers.

The prints are remarkable for the brilliancy and clearness and for the abundance of detail in the dark portions, bearing evidence to the excellent quality of the Passavant plate upon which they were made.

THE PLATINOTYPE PROCESS.*

BY C. A. NEEDHAM.

IT will take far less time to describe the platinotype and show you the details of the process than it took the inventor to perfect it. We are told that it came of much discouraging but determined efforts upon the part of its discoverer, Mr. W. Willis, Jr. What eight years ago seemed to him an almost unattainable solution of an intensely interesting problem has become a very simple method of producing a print from the negative, which may possess these two attractive recommendations-artistic merit and durability. In general, a description of the process is as follows: The sensitized paper, prepared with salts of iron and platinum, is exposed in the usual way-under a negative or in the solar camera. It is then floated for five or six seconds upon a hot solution of oxalate of potassium, and afterwards washed in a weak solution of hydrochloric acid and finally in water. I have here some 18x22 sheets of plain paper, sized

^{*} An address before the Society of Amateur Photographers of New York, at the meeting of November 11, 1884.

to receive the sensitizing material already referred to, and consisting of the salts of iron and platinum. The latter is a dry powder, and the iron is in the form of a solution The proportions are sixty grains of the platinum to one ounce of the iron solution. This mixture should be made as required, and used as soon as possible thereafter. The preparation of the sensitized paper may be safely conducted under gaslight in a room, of the ordinary dwelling temperature, free from draughts. The sheet is fastened at each corner, face upward, upon a smooth, level surface, preferably of plate glass, and about two drachms of the sensitizing solution are poured upon its centre and distributed by means of the squeegee as evenly as possible in this manner. When coated, the sheet is hung up to surface dry in a damping-closet, which is simply a box containing a dish of water. After a lapse of ten minutes, the sheet is transferred to a hot-air box and there thoroughly dried. The surface-drying part of the process is important, for it appears to determine the fixation and depth of the image upon the paper after development. If insufficiently done, or omitted altogether, practice has shown that part of the image will float off in the developer, instead of adhering to the fibre of the paper, and a consequent loss of half-tone will ensue, and that, upon the other hand, if the surface-drying interval be too long-say a longer period than twelve minutes-the image will appear flat from being too sunken into the paper. I have here some pieces of the platinum paper which have been exposed. These I will proceed to develop, and at the same time I will give you the theory of the platinotype process and a more specific description of it. The platinum used is a double salt known as potassic-chloroplatinite. The iron solution is ferric oxalate. By the action of light the ferric oxalate deposit is reduced to ferrous oxalate, which is soluble in hot oxalate of potassium, and instantly dissolves when floated upon it, but in the act of dissolution it leaves upon the paper the platinum precipitated to its metallic state. Thus we have the picture in platinum black, which, it is claimed, will withstand the severest test for durability. The sensitized paper before exposure to light

is of a lemon yellow color. During exposure the parts affected by light become of a pale, grayish-brown color, and frequently of a dingy orange tint under those parts of the negative which present clear glass or nearly so.

The correct exposure is ascertained by inspection of the paper in the ordinary way in a weak light. Great care should be taken to avoid undue exposure to light during examination of the progress of printing, as a very slight action of bright white light will degrade the more delicate whites of the picture, and the extent of the damage cannot be discovered until after development. It is also of the utmost importance that the sensitized paper be kept dry before and after exposure. For the purpose of perfectly preserving it, metallic tubes, such as this I now show you, are made specially to hold it. They are provided with a receptacle containing a dry preparation of chloride of calcium as an extra safeguard against moisture.

The development, which should be conducted in a weak, white light, is effected by floating the printed surface upon a hot solution of oxalate of potassium, the proportions of which are 130 grains of the oxalate of potassium to each ounce of water. This solution should be slightly acid, and, if not found so upon testing with blue litmus, it may be rendered so by the addition of a few drops of a saturated solution of oxalic acid. This liquid is generally held in a flat enamelled iron dish supported upon a tripod, under which is placed a spirit lamp. To avoid airbubbles, place one edge of the print upon the solution first, and gradually lower the remainder with an even-sliding motion. Then, for the purpose of examination, raise the sheet by the edge which first came in contact with the liquid. It will take at least five seconds to develop a print fully, and sometimes the depth of shadows may be enhanced by continuing the development even longer. There is a very great latitude allowable for the temperature of the developing solution: from 100° to 180° Fahr. and upwards. Over-exposed prints may be frequently saved by using a low temperature, and under-exposed ones by employing a high one. The best results are, however,

obtained from negatives which admit of development at a temperature of from 170° to 180°. Such negatives will be found to possess considerable density in the high lights, a full scale of half-tones with clear glass or nearly so for the deeper shadows. development the prints go directly into the cleansing baths. These are made of chemically pure hydrochloric acid, one part to sixty of water. Generally not less than three are used of about equal strength, and the prints are passed from the first to the third, allowing an interval of about ten minutes between each change. object of this washing in dilute acid is to remove all traces of the iron salt, the operation should take place in the daytime, so that the baths may be brought into the fuil open white light, under which conditions the presence of the freed yellow salts may be easily and surely detected. The prints should not communicate the slightest tinge of color to the last acid bath. The plain water washing should continue for about fifteen minutes to remove the acid from the paper, but should never be resorted to until all trace of the iron salt has disappeared. After thorough cleaning, the prints may be dried by hanging them upon glass rods, placing them upon muslin stretchers or chemically pure blotting-paper. As they resemble engravings and such pictures as the photo-gravure, they look well mounted upon rather large cardboards which provide white margins. I will invite you to examine some samples of a fine grade of platinotype printing, and some exquisite studies which were kindly made for this occasion by Mr. Geo. W. Wood, an artist of Philadelphia. The solar enlargements and linen printing are from the establishment of Messrs. Hoyt & Siebert, of this city. There are some slight modifications of the process which adapt it to solar printing and for impressing other fabrics than paper, which I will not trespass upon your time this evening to describe. I hope that what I have shown has been sufficient to enable those who may feel so disposed to make a few successful experiments with this beautiful art, and for that purpose the paper we have sensitized this evening is at your service, and I trust that the samples I have just developed may be acceptable to the Society as souvenirs of this demonstration, many of which show the refined taste of Mr. Lafayette W. Seavey in figure-posing and arrangement of draperies or accessories.

ON THE RELATIVE RAPIDITY OF LENSES AND THE USE OF STOPS *

BY C. W. DEAN.

In photography, one lens is said to be more rapid than another when the light passing through it in a given time will produce greater chemical changes. This rapidity is governed by several elements. Among these are the color of the lens, the number of its reflecting surfaces, its equivalent focus, and the size of its aperture.

In answer to an inquiry as to whether there was any mathematical formula to express the relation between the areas of aperture and the duration of exposures, President Barnard, of Columbia College, said: "The hypothesis on which the Photographic Society of Great Britain have founded their law, is that chemical changes effected by light are more rapid in proportion as the intensity of the light is greater, and this with so severe mathematical accuracy that a double intensity will reduce the time necessary for exposure by one-half. But this is entirely an a priori assumption. It has been adopted because it seemed as if it ought to be so, and not because experiment has proven that it is so. Before attempting to construct a formula which should express the relation of intensity of light to the duration of exposure required to produce a definite amount of chemical change, we should require to know more than we do about the laws which govern chemical changes during their progress, for the law which you find to fail takes it for granted that the resistance to change opposed by a chemical compound to the action of light is uniform from beginning to end-a thing which we have no right to affirm. I know of no better means of determining this relation between area of lens and the proper duration of exposure than careful experiments, systemati-

^{*} A paper read at a meeting of the Society of Amateur Photographers of New Yokr, Nov. II, 1884.

cally conducted with lenses of various areas, and with similar illumination throughout. An empirical law might thus be ascertained, which for practical purposes would answer quite as well as a theoretical formula mathematically expressed."

The laws governing the rapidity of the lens, neglecting its color and the number of its reflecting surfaces, are, First—The relative rapidity of two lenses having the same apertures is inversely as the square of their equivalent foci. Second—The relative rapidity of two lenses having the same equivalent foci is nearly as the areas of their apertures.

For example, take two lenses having the same sized aperture, one having an equivalent focus of twelve inches, and the other of six inches; the lens with the six-inch focus will be four times as rapid as the other. Or of two lenses having the same equivalent foci, one with an aperture two inches in diameter, and the other with an aperture of one inch; the two-inch lens will be approximately four times as fast as the other.

The Photographic Society of Great Britain, in order to overcome the great confusion arising from the different systems-or rather lack of systems-used by different opticians in numbering their stops, have adopted a "universal system," based upon the ratio between their diameters and the equivalent focal length of the lenses with which they are used. As the basis of their system, they have taken a portrait lens the diameter of whose aperture is one-fourth its equivalent focal length, calling that stop or aperture No. 1; stop No. 2 is one of half the area, and, therefore, requires approximately twice the exposure. In this "universal system" the number of stop represents the number of seconds exposure required by the stop, when stop No. 1 requires an exposure of one second.

I think a modification of this system would be of the greatest possible advantage to amateurs in enabling them to express the duration of exposure in terms which are common to all lenses.

Those of us who have attended any of the Society excursions during the past summer, must have felt disappointed in the small amount of information we were able to obtain from each other regarding exposures, owing to our lack of knowledge regarding the rapidity of

our lenses and the relative value of the stops we were using.

This can be easily remedied by representing the size of our stops in terms of the focal length of the lens.

Expressing the size of the stops by their diameters, as is frequently done, is only misleading; and unless the focal length is given is of no practical use.

A half-inch stop, used on a lens with an equivalent focus of twelve inches, would require four times the exposure that the same stop would require on a lens of six-inch equivalent focus. As the rapidity of lenses is controlled by their equivalent focal lengths, and also by their apertures, no "scientific" or "universal" system of stops can be made, except one based on these two elements; the ratios between the areas of apertures and duration of exposures having been determined by careful experiments. In order to correct a very general misunderstanding regarding what is called equivalent focus and how it is obtained, it may be advisable to state that the expression is used in connection with compound lenses, and means a focus of some distant object equal to that produced by a single plano-convex lens, with the plane side toward the object producing an image of the same distant object of the same size. In the case of the plano-convex lens, we can easily measure its focal length by measuring the distance from the image on the ground glass to the convex surface of the lens. In compound lenses, however, this will not give us the true focal length, but what is usually called the "back focus." The equivalent focus of a compound lens is the distance from the image on the ground glass of some very distant object, to a point within the lens called the centre of emission.

This point is obtained by a formula based upon the radii of the curves of the different lenses, and the refractive power of the materials used in the lenses. Fortunately it is not necessary for us to use the formula, for the equivalent focus of any form of lens can be easily obtained in the following manner:

Mark two perpendicular lines on the ground glass equidistant from the centre. Set the camera on a sheet of paper and focus on some point in a very distant object. Move the camera so that this point will fall upon one of the lines on the ground glass. Draw a pencil along the side of the camera, ruling a line on the paper underneath. Now partially rotate the camera on a centre passing through the centre of the lens, until the point falls upon the other line on the ground glass, and draw another line on the paper. Extend these two lines until they meet. Bisect this angle with a line upon which you erect a perpendicular equal in length to one-half the distance between the two lines on the ground glass. Connect the top of this perpendicular and the bisecting line with a line parallel with the side of the angle. The distance from the point where this line touches the bisecting line to the foot of the perpendicular is the absolute focal length of the lens used.

The object in focussing upon a very distant object is that we may obtain the focus from parallel rays. This focus is represented by f, and of course is entirely different from the focus of converging rays from an object near the lens. A practical fact regarding the equivalent focus of the lens is that it controls the size of the image; that is, two lenses of the same equivalent focus, when focussed upon any distant object, will produce images of the same size. A lens having twice the focal length of another, when placed in the same spot and focussed upon the same distant object, will produce an image having twice the linear dimensions of the image given by the first. Having obtained the equivalent focus of the lens, we can designate our stops in terms of $\frac{f}{T}$ by means of a fraction, the numerator of which is equal to the diameter of the stop, and the denominator is equal to the equivalent focus of the lens. Reducing this fraction to an equivalent, one whose numerator is unity, we have a fraction which means that the diameter of the stop is one-eighth, onetwentieth, or one-fortieth, as the case may be, of the focal length of the lens.

To show that this focal length is the one from parallel rays, the fraction is usually written $\frac{f}{s}$, $\frac{f}{f}$, $\frac{f}{d}$.

Having marked our stops in terms of their focal length, we can approximately determine the relative duration of exposure required by each by remembering that these fractions represent the diameter of aperture whose areas are to each other as the squares of these diameters; and that approximately the duration of

exposure is inversely as the areas of the stops; for example, to ascertain the relative time required by two stops, $\frac{f}{10}$ and $\frac{f}{30}$, the area of the first can be represented by $(\frac{1}{10}) \ 2 = \frac{1}{100}$, and the second by $(\frac{1}{30}) \ 2 = \frac{1}{900}$. This shows that the first stop is nine times as large as the second, and requires approximately one-ninth the time for exposure.

The same result is obtained by dividing one fraction by the other and squaring the result.

While the above rules will assist us in obtaining correct exposures with the different size stops, an equally important question is, "Which stop shall I use?" Up to certain limits, the smaller the stop the greater the sharpness, depth of focus, and size of good picture obtained. The small stop, however, produces a map-like effect, and tends to harshness of contrast and to diminish aerial perspective.

Some opticians say that the diameter of the smallest stop should never be less than one-twenty-fifth or one-thirtieth the focal length of the lens. On the other hand, the larger the stop (if correctly exposed) the greater the amount of detail in the shadows, and the bolder the picture, and the greater the amount of "atmosphere."

Probably the best rule to adopt is to use a stop small enough to give sharp definition at the edges of the picture, and no smaller. To secure uniformity in our work, and enable us to aid each other in answering that vexing question, "How long shall I expose?" I would suggest that the members of this Society mark their stops in terms of f, and also with a figure representing the approximate relative value of the stop as compared with the full opening of the lens with which it is used. For example, a stop marked 7 1/22 would mean that the stop requires seven times the exposure of the full opening of the lens, and the diameter of the stop is equal to one-twenty-second of the focal length of the lens.

As most of us use lenses working no faster than $\frac{f}{7}$, the adoption of the "Universal" system, based on $\frac{f}{4}$, would necessitate an amount of mental arithmetic which some of us might consider tiresome. In this system, the first figure would show the relative exposure as compared with the other stops; while the fraction would show the rapidity of the lens as compared with other lenses.

By adopting this system the members of the Society would be able to obtain correct exposures with any lens, regardless of the maker of its form, and would not be tied down as at present to the particular lens with which we are familiar. Our work as a society, to be effective, must be systematic; and it seems to me that among the first things we should do is to adopt some system of stops.

IODIDE OF SILVER IN GELATINE EMULSIONS AND THE PREPARATION OF IODO-SILVER EMULSION.

BY DR. C. STURENBURG.

When gelatine emulsions first engaged the attention of photographers, bromide of silver was exclusively employed as the material for rendering the film sensitive to the influence of light, but now-a-days it is almost a universal custom to add a greater or less quantity of iodide of silver to the bromide emulsion to give those virtues which seemed to be absent when bromide alone was used, namely, strength and clearness in the negative.

Similar phenomena are manifest in the use of the wet collodion process. When results with different collodions are compared with one another, they will be found to differ in behavior accordingly as bromide or iodide has been used in their constitution.

A collodion which only contains bromide salt, gives even in the densest portions of the picture very great definition, but it is very flat and tame.

A collodion containing exclusively iodides, on the other hand, gives an image which is full of vigor, brilliant, and strong, but only the bright portions of the original are repeated with emphasis.

By a proper union of two such collodions, as every practical photographer who is used to making his own plates is aware, one may be formed which has strength as well as softness.

From these properties of the two collodions, from the mutual supplementing of one another, has arisen the endless number of collodion receipts and formulæ, since by the addition of certain proportions of bromide or iodide the properties of strength and softness may be attained.

Pure iodide of silver possesses peculiar sensitiveness for certain rays—those which are very bright and strong; white, blue, and violet; whilst those of less refrangibility, red, orange-yellow, have a very feeble action, or scarcely any; but bromide of silver, on the contrary, gives a peculiar sensitiveness for these latter rays.

Now the action is similar with gelatine emulsions.

As already mentioned, the application of pure bromide of silver in many cases gave rise to weakness and tameness in the negatives, and a collodion containing both bromide and iodide gave greater strength and brilliancy.

The use of the iodide in gelatine emulsion has been avoided, because it is imagined that a loss of sensitiveness is occasioned thereby, and a certain coarseness in the emulsion.

Experiments are being made in England upon the subject, and it has been so far found that this diminution of sensitiveness is apparent rather than real, and may be easily prevented.

A brom-silver emulsion, containing a certain quantity of iodide of silver, if digested as long as a pure brom-silver emulsion, is found to be more sensitive than the latter, and the sensitiveness increases with addition of iodide. An emulsion containing iodide may be digested longer without any danger of fog, and retain the same degree of sensitiveness as a pure bromide of silver emulsion.

Further, the negatives resulting from a mixed emulsion possess greater strength in the high lights, greater strength in the shadows, and a color nearer a wet plate.

Inasmuch as the iodide of silver emulsion gives thicker—that is to say, more opaque—films than pure bromide of silver emulsion, it follows that with long exposure the so-called solarization is not so apt to occur.

An iodide of silver emulsion may be subjected to a long exposure without any risk of being ruined thereby.

Those who have the skill to prepare plates for themselves have it in their power to make such as possess different degrees of sensitiveness. It is true that with the use of pure bromide of silver this is also possible, but the danger of ruining the emulsion by too long digesting or boiling is much greater than when iodide of silver is present. This is of the

greatest importance in practice of emulsion making, and in its application to reproductions.

The amount of iodide of silver which has so far been employed in the preparation of gelatine plates is, in proportion to the amount of bromine, very small, but greatly varying in the different formulæ put forth. The amount could even be increased in the preparation of emulsion for ordinary use. The results of the two might be compared.

It would be urged that it is very difficult to prepare a gelatine emulsion containing iodide of silver which shall possess the same degree of fineness as one containing bromide of silver, It will be found to be much coarser in grain.

In the *British Journal* (June, 1884) there is a method given for the preparation of a very fine grained iodide bromide of silver emulsion.

To prepare such an emulsion, add to the concentrated gelatine solution first the silver solution, slightly acid; then follow the iodide solution, which it is most advisable to mix with a portion of the gelatine solution, and last of all the bromide.

By this plan the iodide of silver comes in contact with an excess of nitrate of silver, and is formed into a concentrated gelatine solution. This, as well as the strong dissolving power of the silver nitrate, acts upon the iodide of silver so that it is formed much slower and in a much finer state of division.

Another method, when no great amount of iodide of silver is required, is as follows:

The iodide of silver is precipitated in an aqueous solution, dissolved after washing in a concentrated silver solution, and added to the bromodized gelatine solution.

If a pure iodide of silver emulsion is to be made, the following plan is the best:

Suppose we wish 150 cc.m. of emulsion; weigh out 100 grains (6.2 grammes) of nitrate of silver, and dissolve it in 60 cc.m. of water, to which 50 grains (3.1 grammes) of gelatine, and 2 drops of nitric acid are added. Next dissolve 50 grains (3.1 grammes) of gelatine and 40 grains (2.5 grammes) of chloride sodium in 60 cc.m. of water. The two solutions are mixed and stirred well together, and left to stand in a warm place for an hour to set. A chloride of silver emulsion is obtained in this way with such a fine grain that the film is almost transparent. To change this chloride

into iodide of silver emulsion, all that it is necessary to do is to pour a solution consisting of 120 grains (7.5 grammes) of iodide potassium in 60 cc.m. of water upon the set mass. In a few hours the decomposition of the chloride of silver is complete.

The precipitate possesses the same fineness as the chloride emulsion. It is now washed in the usual manner. The operation may be expedited, and the decomposition effected more readily, if the chloride of silver emulsion be finely divided after it has set, and in this condition treated to the iodide of potassium solution.

This iodide of silver emulsion may be used alone, or in union with bromide of silver emulsion.

Comparative experiments could be better conducted in this manner and more exact than when the iodo-bromide of silver emulsion is prepared together.—Deutsche Photo-Zeitung.

DR. REICHERT has published a paper on the preparation of albumen. The author discusses the processes of Hoppeseyler, of Wurtom, and other chemists. He calls attention to the investigations made by Messrs. Leboute, Gournœns, and Sherer, which show that the white of an egg is not pure albumen, that crystallizable acetic acid, or diluted, produces a precipitate in its solution; finally, that it contains globuline, from which it may be freed by adding acetic acid and afterwards filtering. Last year Professor Hoppeseyler proposed to purify egg albumen by a treatment at 20° C. with sulphate of magnesia (after the separation of the membrane), followed with another treatment with sulphate of soda, etc. This long and tedious process has been improved upon by M. Reichert. The white of egg, separated from the membrane, is simply treated with gaseous carbonic acid, or with seltzer water (water charged with carbonic acid). This produces a flaky precipitate, which is separated by filtration .- Paris Moniteur.

WILSON'S PHOTOGRAPHICS.—It is the best book I ever got possession of. Those who want lightning or instantaneous processes had better get a copy and work with pleasure. Nothing like it; too good to be without.—Joseph Theiring, Cincinnati, O.

Editor's Table.

REPORT OF THE TREASURER OF THE P. A. of A. -We have received from Mr. W. A. Armstrong, Treasurer, the annual report of the Photographers' Association of America, which we append below. We regret to see that some contributions made to this fund are not reported. Among these we recollect one of the BLAIR TOUROGRAPH AND DRY-PLATE COMPANY, of Boston, of a contribution of fifty dollars. Of course, these gentlemen are not anxious to pose as great benefactors, but since they had so large an exhibit as they did, and occupied as much space as they did, they of course, did not wish to appear to the fraternity as closefisted, or as having contributed nothing. The well-known liberality of these gentlemen is commensurate with the excellence and beauty of their apparatus, and we regret that their contribution was left unnamed in the report of the Treasurer. It may be that this, and perhaps other omissions, were caused by want of system on the part of one or more officers, and perhaps a supplemental report will be made presently, which will set all things right. Some of the items of expenditure here are rather new to those of us who have conducted exhibitions heretofore, but we presume they also had the sanction of the Auditing Committee. It certainly costs a good deal more to run a convention than it used to, and we still adhere to our idea that much more should be received of use to photographers for the amount of money expended. Perhaps as we grow older we shall improve.

Passavant's Dry Plates.—Those who are convenient to Dr. S. C. Passavant, 306 Guerrero Street, San Francisco, will find it to their advantage to try his plates. As mentioned in our last number, he has purchased the Tabor factory, and combined the two establishments into one five or six times as large as that formerly occupied by him, which with the changes made, will, as the Doctor believes, be not the largest, perhaps, but one of the best fitted-up factories of the United States, where he will be able to turn out a large quantity of plates. He not only supplies the market on the Pacific

Coast, but does quite a nice business with China and Japan.

REMOVAL.—The H. C. UNDERWOOD MANUFACTURING COMPANY has removed from Kalamazoo, Michigan, to Waterloo, Indiana, in order to have better facilities for securing material. Photographers desiring mailing and packing-boxes, will do well to read the advertisement of this firm. Their work is excellent.

DISTINGUISHED AMATEURS.-If JOHN TURPINE and Tom RICHIE could roll face up in their graves and see the modern camera, they would look upon their own ancient inventions as large enough for coffins, and probably reëxpire. Another choke would be given them if they could see what distinguished persons now grace the amateur profession. Among these was the late Cornelius Vanderbilt, who shot himself, not with a camera. Then, at present, we have a grandson of ABRAHAM LINCOLN, who photographs everything from a war vessel to a President; a son of General Ames; son of Governor ROBEY, of Maine; a son of JAY GOULD; the daughters of Ex-Mayor OAKEY HALL, of New York, and the sons of a great many photographers too tedious to mention.

MR. J. W. Riggs, Lewiston, Idaho, writes: "I have been in the photographic business for twelve years, and all I know about photography I have obtained from your noble and valuable publications. I love the art and take great pride in it, but I could not possibly get along without your magazine. I have been reading the last year's numbers with great interest with regard to prices, and truly hope that there has been good done. I consider prices lower than four dollars for cards and six dollars for cabinets a disgrace to our profession, and any man who makes them for less ought not to be allowed to practise. I do not think we do as much cheap work on the Coast as you do in the East."

MR. ROBINSON'S BOOKS.—Mr. M. H. ALBEE, one of our subscribers, says with reference to

Mr. H. P. Robinson's new book, Picture aking M by Photography: "I esteem it a book of much valuable information which no photographer should be without if he wishes to improve and possess the title of artist. Mr. Robinson leads us into new ways, opens up new industries in the vivid instructions how to use them and how to act. He has shown us where art is in photography. This book, in conjunction with Pictorial Effect, cannot but lift the photographer to the realms of art, provided its readers follow his instructions. I cannot forget in this connection to mention your valued work Photographics as a helper to advancement in photography."

New Cameras and Holders.—The Scovill Manufacturing Company announce that they have devised of late a line of new cameras and holders more compact than any yet made for the accommodation of gelatino-bromide of silver films. They also announce that they have a stock of these films on hand ready for the market.

We were recently honored with a visit from Mr. Frederick York, the distinguished English photographer, whose beautiful views are known to almost everyone. Mr. York is a very courteous and genial gentleman, and his object in visiting our country is both for pleasure and to become acquainted with the ways and habits of American photographers. We enjoyed several very pleasant conversations with him, and learned many important facts connected with English photography.

MR. PANCOAST'S INDIAN VIEWS .-- The Philadelphia Photographic Society, at its last meeting, enjoyed a rare treat in the exhibition given by Mr. CHARLES R. PANCOAST, of slides from negatives taken during his sojourn in India. We were well acquainted with the abilities of Mr. PANCOAST, and had seen frequent examples of his excellent work, but we were surprised at the clearness, sharpness, and artistic beauty of these pictures shown upon the screen. There was a number of views of the Industrial Exhibition held at Calcutta. In lighting of the subjects, in the point of view from which they were taken, in the clearness with which all the detail was brought out, nothing could go beyond. His views of the scenery in India, of the marvellous temples and tombs of that strange land, surpassed any of the English photographs that we have seen in this country. The views of the

Taj were marvellous—one of the most difficult subjects, from the intense whiteness of the tomb, and the dense green of the thick foliage that surrounds it. There was not the slightest blurring in the dense shadows, while the detail of white building was perfect. His instantaneous views were full of life and activity, and each passing motion was caught to perfection.

The distinguished photographer, Mr. Henry Rocher, of Chicago, of whose superb work we had the privilege of giving our readers an example last month, has allowed his mantle to fall upon Mr. W. L. Bates, late of Denver, Col., who is prepared to carry on the business under the name of W. L. Bates & Rocher, upon the same principles, and to give his patrons the same quality of artistic work which has secured Mr. Rocher so enviable a reputation among photographers.

THERE is a probablility of a long contest among the photographers of Syracuse, N. Y. In January they formed an association which divided the galleries into first and second class. Each class had its rates fixed, the first class holding at seven dollars a dozen for cabinets. One of the members of this class advertised that he had reduced his rates to four dollars a dozen. The remainder of the association issued a call for all the members to meet and express their just indignation at the conduct of the renegade, but very foolishly resolved to put their rates below his. The Syracuse Association should not forget that there can be no permanent prosperity for those who violate the law of just relation between production and value. The man who puts down his prices, or the cheap photographer, may depend upon it that the public, who recognizes this natural law, sets a value upon his productions at the price he puts upon them himself. If there is to be any competition, let it be in the direction of good work, and let the price be in accordance. The Association of Syracuse Photographers would have done better had they met and resolved to keep their prices at the standard agreed. The cheap mean man would have soon been pushed to the wall, but by their plan they are only putting weapons in his hand. We hope they will meet again to better purpose, and determine to excel in good work, and to charge a good price for it.

THE importance of a fine finish to a photograph need not be urged upon any photogra-

pher. They all know that however artistic the posing and arrangement of the picture may be, however skilful the disposing of the lights and shades, they will fall flat, stale, and unprofitable unless care and taste are exercised in the mounting and finishing. How the beauties of a photograph are brought out by the burnishing to which they are subjected. There is a transparency given to the deep shadows which seemed hardly to have an existence before. No painter who valued his reputation would let his work go from his hands without the varnishing. Its true worth could not be estimated, and so the excellence of a photograph is only brought out in its full measure by the smooth surface which the burnishing tool effects. American photographs are acknowledged to have a finer finish than those of other countries, and we think this is due largely to the perfection which has been attained in the construction of burnishing tools. The fame of Mr. Entrekin's Oscillating Burnisher is established. It is perfect in all its details, giving a uniform and even pressure over the whole surface. It is so constructed that it can be easily cleaned and arranged so as to secure and utilize the greatest amount of heat with least expenditure of gas, a particular in which it far excels any other. The bed-plate and roller are of the hardest steel, with a surface in which the slightest irregularity cannot be perceived. In a word, it is the nonpareil of burnishers, and no photographer, even the most fastidious, could ask more virtues in any machine.

MR. E. L. WILSON.

DEAR SIR: For years past I have noticed in the background of prints, a fine speckled appearance, and when a bath gets weak and old, much worse than in a new bath. I am using forty grains of silver and twenty grains of nitrate of ammonia, but the bath has been in use a long time, with an occasional rectifying and boiling down. It is now sixty-five grains greater by the hydrometer. What is the cause of those specks? How can excess of nitrate of ammonia be gotten out of an old bath? for in constantly strengthening with new silver and nitrate of ammonia, it seems to me that the silver must be used out by combining with the chloride in the paper, while the nitrate of ammonia can only be used out with the solution, and hence in course of time must become in excess. A short article in the journal, leaving my name out, will be of great use to the profession, for I often see such defects in the work of the best artists.

Mosaics, the photographer's jewel.

On examination of the print which the writer accompanied with his letter, we would suggest that he use a stronger silver bath, or perhaps he has used either too acid or too alkaline toning bath. The best method to follow in printing and toning is that adopted by ourselves in preparing the beautiful prints which adorn the PHILADELPHIA PHOTOGRAPHER: Silver bath, 50 grains to 1 ounce of water, slightly alkaline; float paper 12 minutes; dry thoroughly before fuming; have fumiug-box dry, and fume 30 minutes. Before washing, immerse prints in bath of acetic acid and water, I ounce of acetic acid and 16 ounces of water. Allow prints to remain in it until decidedly red. Do not let the prints lie motionless, but move them around in the water. Wash well, and then tone. Add enough gold to tone, neutralizing with sal soda. Either test with litmus-paper, or judge by the slight slippery feel of the solution. Fix as usual (1 ounce of hypo to four ounces of water). They are then put in a solution of salt and water (1 quart of salt to 10 quarts of water) to prevent blistering. Then wash.

The difficulty with many seems to be in the insufficient fuming of the paper, rather than in the bath.

If these instructions are followed, we are confident that all defects will be avoided, and beautiful prints come from the fixing bath, presupposing, however, that a superior brand of albumen paper like the N. P. A. of Messrs. Anthony & Co., of New York, be used, which in brilliancy and keeping qualities surpasses all others.

N. P. A. ALBUMEN PAPER.—We desire to call the attention of our readers to the brilliancy and soft finish of the photographic prints of "Our Picture" in this month's journal. No matter how good the negative, or how careful the operator may be in the manipulation of the photograph, its beauty will be marred and its "right perfections wrongfully disgraced," unless a superior quality of paper be employed. There are so many operations, so many trying ordeals to which a paper print, must be subjected before it comes forth in all its excellence, that it is on wonder that so many varieties of photographic papers yield to the chemicals to which they are subjected, and thin, measly, unsatisfactory prints result, and the photographer is in despair. The N. P. A. Albumen paper of Messrs. E. & H. T. Anthony & Co., New York, posseses all the virtues of a good paper, preëminently, and comes forth unscathed, delighting the photographer with the brilliancy of the work. This paper requires less gold in toning than others, and its keeping qualities are unsurpassed, preserving its whiteness and clearness to the end.

Mosaics, 1885, is now ready for distribution. See the advertisement. A new feature is introduced this year, namely, the addresses of the contributors, so far as we are permitted to give them. This will enable correspondence to be carried on by those who wish it. We hope that none of our readers will make it a burden to our contributors by writing to them needlessly. If they do, perhaps they won't get answered.

A CARD.—I beg to inform you hereby, that I have this day transferred my interest in my photographic studio to Mr. W. L. BATES, who will henceforth conduct the business under the firm name and style of W. L. BATES & ROCHER. While I allow my name to be used in the new firm, I am no longer liable for any debts contracted by the new firm, as I have virtually severed my connection with the new firm.

Very truly yours,
HENRY ROCHER.

A CARD.—Referring to the annexed circular, I beg to affirm all that was said in the same by Mr. H. Rocher, and upon taking charge of the business of the late firm, beg of you the same kind consideration you bestowed so generously upon my predecessor. Very truly yours,

W. L. BATES.

PICTURES RECEIVED .- From Mr. R. MAY-NARD, of Victoria, B. C., a number of views of children posed and lighted to represent statuary, also pictures which are striking for their novelty in the lighting. With a great deal of ingenuity Mr. MAYNARD has designed a picture entitled the "Gem Begonia," in which the leaves are composed of a multitude of heads of little children, but the real gem of the collection is called the "Brothers," representing two very pleasant-faced little boys, very nicely posed and excellently lighted. From Mr. L. A. HUFFMAN. Miles City, Montana, a number of well-executed stereoscopic views of Yellowstone Park and scenes of wild life in the West. Mr. EDGAR CLENY, of San Francisco, also sends us views of the great trees of that wonderful region. From Mr. N. H. Busey, Baltimore, several superb pictures of his artistic work, which in softness of finish, beauty in lighting, and the repose which he has secured upon the expression of his sitters, cannot be surpassed. The faces are perfectly free from that photographic consciousness of "being taken," which mars too frequently some of the best work. It requires skill in the operator to secure expression—a skill which amounts to a genius. Mr. Busey's portraits are not so much speaking as they are thoughtful. We can almost imagine the train of thought which is passing through the mind of one of these breathing photographs. One thing we can affirm, the thoughts of that beautiful female head are anywhere but upon the camera, and the exposure which is about to begin.

PHOTOGRAPH OF A CYCLONE.—The Herald has received a fine photograph of the cyclone which passed through Miner County, Dak., August 28th, taken at Howard, Dak. The cylone, it will be remembered, was first discovered about four o'clock on a bright afternoon, when, with the exception of a few heavy banks of clouds, the sky was clear and the sun was shining pleasantly. Suddenly a monstrous funnelshaped arm shot downward from one of the clouds, and a moment later the cyclone was formed and was moving slowly across the prairie, carrying destruction to everything in its course. The cyclone remained in sight about two hours. The photograph is a great curiosity, and undoubtedly is the only photograph of a cyclone ever taken .- Rock County, Minn., Herald.

A CARD FROM W. D. GATCHEL .- Your journal just received, in which is a list of those who contributed to the Photographers' Association of America for expenses of the Cincinnati Convention. I gave twenty-five dollars for this purpose, and also took a page in the circular sent to photographers, but no mention of this is made in the report of the Treasurer. I gave twenty-five dollars last year, but my name was left out of the list of donations. I do not wish to have the appearance of unwillingness to contribute to the necessary expenses of the Association. I feel that these omissions place me in a false position. I believe the Conventions are very beneficial to all parties interested, and I am always ready to do my part in supporting them

Respectfully, W. D. GATCHEL.

Mosaics for 1885 surpasses all others in the quality of matter, we have therefore greatly increased the number of the issue, but are confident that a few months will exhaust them.

Specialties.

MAKE OUT YOUR OWN BILL, and remit cash with your advertisements, or they will not be inserted.

ADVERTISING RATES FOR SPECIALTIES.—Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. We We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement. Postage-stamps taken.

HOLIDAYS AND WINTER SEASON.

If you are thinking of getting something new for your skylight, a background, fire-place, cabinet, tree, wall, negatives for borders, or any other article, bear in mind that we have many designs, and can suit you.

LAFAYETTE W. SEAVEY,

216 E. Ninth St., N. Y.

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ACCESSORIES,

REMOVED TO 68 WEST FOURTH ST., 4 BLOCKS WEST OF BROADWAY, N. Y.

My new studio is fitted up with all the modern improvements, and the most refined demands from a critical public can be satisfied. A visit to my establishment, which has the largest showroom, containing the greatest amount of stock of any place in the world, will be gratefully appreciated.

I have again added numerous new designs to my great variety of patterns for backgrounds and accessories, and keep also in stock a large quantity of goods for parties to select from, saving time and delay on orders.

EVERY photographer in want of excellent lenses, for any purpose, will best serve his interest by consulting the new illustrated price-list of Messrs. Benjamin French & Co. | before purchasing.

ROCKWOOD SOLAR PRINTING CO.

17 Union Square, New York.

TIME.—It is our intention that every order received in the morning's mail (when not to be put on stretchers) shall leave this establishment the same day or the following morning. If too late for the morning work, it is sent on the second day. Having our own engine and electric light, we are not at all dependent on the weather.

GEORGE H. ROCKWOOD, Business Manager.

WILSON'S PHOTOGRAPHICS.

\$4.00. Post-paid. \$4.00.

THE PLATINOTYPE PROCESS.
NOTICE!

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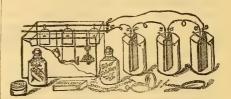
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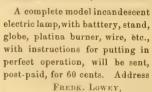
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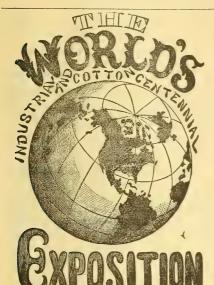
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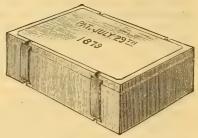
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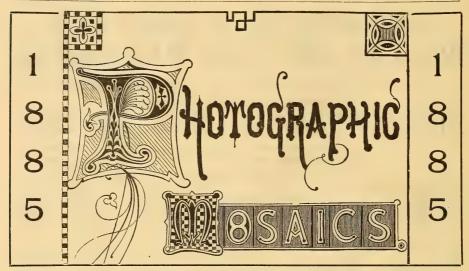
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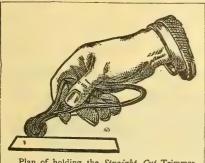
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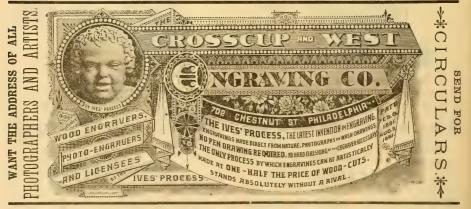
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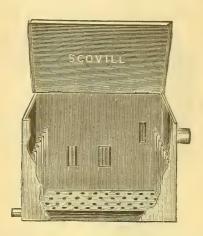
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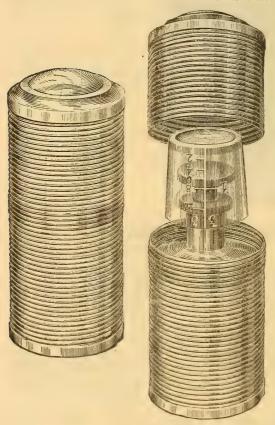
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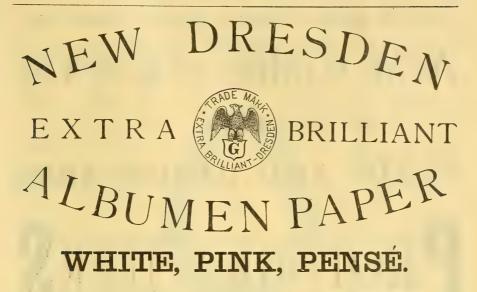
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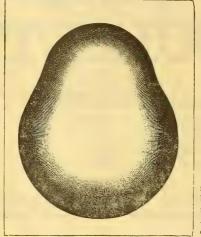
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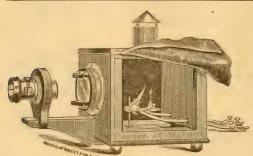
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31/2 x 41/4,		\$0 60	5 x 8,		\$1 75	11 x 14,		\$6 50
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66	41/4 x	5½,			"	1	00					"		
44	4 1/4 x.	3½,		٠.	"	1	20			x 20,		4.6	16	
44	5 x'	7,			"	1	55	64	17	x 20,		6.6	17	00
	5 x 8					1	75	"	18	x 22,		66	20	00
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Contributions from both Actives and Amateurs are invited. Proceedings of Societies are very useful and should be sent quickly.

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